

OLDFIELD, PATTINSON & CO.

WHOLESALE & EXPORT DRUGGISTS,

17 TODD STREET, MANCHESTER.

Sole Proprietors and Manufacturers of the

"Silver Churn" Butter Colouring,

A purely Vegetable preparation for giving to Butter, at all seasons, a rich cowslip tint, not obtainable by other means. It is the best and cheapest preparation in the market, and does not crust or deposit like the Danish and American makes, and has the further advantage of being a Home Product. Druggists in the grazing districts will find this a very saleable line. It is sold in bottles attractively got up at

6d. 1s. 2s. 5s. size

4s. 8s. 16s. 38s. per dozen.

less usual 10 per cent. discount. Buyers of £5 worth gross value, which may be assorted to suit their requirements, are put on full wholesale terms.

For large Dairies and Druggists who prefer to bottle it under their own name, it may be had in bulk, in 1, 2, and 4 gallon bottles, and 1, 3, and 5 cwt. casks, at special prices, which will be sent on application.

THE "SILVER CHURN" ESSENCE OF RENNET.

For the preparation of Devonshire Junkets, Curds and Whey, Cheese Cakes, &c.

This is always uniform in strength, and, as the above-mentioned dietary articles are growing in favour, will command a ready sale.

6d. size, 4s. per dozen; 1s. size, 8s. per dozen; 2s. size, 16s. per dozen.

TERMS AS ABOVE.

THE "SILVER CHURN" CHEESE RENNET.

A highly concentrated preparation, introduced specially for large Dairies and Cheese Factories, one tablespoonful being sufficient to curdle Twenty-five Gallons of Milk.

Sold in $\frac{1}{2}$, 1, 2, 4 gallon bottles and 30-gallon casks, at special prices which may be had on application. The attention of Druggists in the Cheese Districts is particularly directed to this article.

FLUID EXTRACT OF HERBS (Botanic Extract)

FOR MAKING HERB BEER.

This is a very superior preparation, and is meeting with great success, there being a growing demand for an article of this description during the Spring and Summer Months.

Price in 2-gallon bottles, 1s. per lb. Price bottled, 6d. size, 4s.; 1s. size, 8s.; 2s. size, 16s. per dozen.

Attractively put up with plain labels and metal capsules.

CUCUMBER CREAM AND GLYCERINE.

1s. 2d. per lb.; 1s. in Winchester Quarts. Inseparable and delicately perfumed.

APERIENT SUMMER SALINE.

1s. 4d. per lb.; 1s. 2d. in Pottle Bottles. Pleasantly flavoured and will not cake in the bottles.

CONCENTRATED SOLUBLE ESSENCES.

Prepared specially for Cordials, Aërated Waters, &c., and will mix with Water or Syrup in any proportion without turning turbid

Essence of Capsicum ...	5s. per lb.,	4s. 6d. in Wr. Qts.	Essence of Horehound	3s. per lb.	2s. 6d. in Wr. Qts.
" English Hop	5s.	" 4s. 6d.	" Lemon	3s. 6d.	" 3s.
" Ginger	4s.	" 3s. 6d.	" Orange	3s. 6d.	" 3s.
" Ginger Ale	4s. 6d.	" 4s.			

Buyers of 12 Winchester Quarts and upwards are requested to write for a special price.

PRICE LIST WILL BE SENT ON APPLICATION WITH BUSINESS CARD.

ESTABLISHED 1842.

THE SCHOOL OF PHARMACY*Of the Pharmaceutical Society of Great Britain.*

Chemistry, Prof. DUNSTAN, M.A., &c.

Practical Chemistry, Prof. ATTFIELD, F.R.S., &c.

Botany, Prof. GREEN, B.Sc., &c.

Materia Medica, Mr. E. M. HOLMES, F.L.S.

Practical Pharmacy, Mr. JOSEPH LACE, F.C.S., &c.

FORTY-EIGHTH SESSION, 1889-90.*Application for admission to the School, for Prospectuses, or for further information or advice may be made to the Professors or their Assistants in the Lecture Room or Laboratories, 17 Bloomsbury Square, London, W.C.*

Ready this day. Sixth Edition, 24mo., in limp roan, pp. xii, 485.

THE EXTRA PHARMACOPŒIA,

By WILLIAM MARTINDALE, F.C.S., and W. WYNN WESTCOTT, M.B. Lond.

LONDON: H. K. LEWIS, 136 GOWER ST., W.C.

Published by J. & A. CHURCHILL.

The Pocket Formulary and Synopsis of the British and Foreign Pharmacopœias; containing all the Formulae of the B.P., and comprising standard, approved, and most recent Formulae for the Preparations and Compounds employed in Medical Practice. By HENRY BEASLEY. Eleventh Edition. 18mo., 6s. 6d.

By the same Author.

The Druggists' General Receipt Book: comprising a copious Veterinary Formulary, numerous Recipes in Patent and Proprietary Medicines, Druggists' Nostrums, &c.; Perfumery and Cosmetics; Beverages, Dietetic Articles and Condiments; Photographic Chemicals and Formulae; Trade Chemicals; Scientific Processes; and an Appendix of Useful Tables. Ninth Edition. 18mo., 6s. 6d.

Also,

The Book of Prescriptions: containing upwards of 3,000 Prescriptions, collected from the practice of the most eminent Physicians and Surgeons, English and foreign; comprising also a compendious History of the Materia Medica, Lists of the Doses of all Official or Established Preparations, and an Index of Diseases and Remedies. Sixth Edition, much enlarged. 18mo., 6s. 6d. [3]

LONDON: 11 NEW BURLINGTON STREET.

THE LIVERPOOL SCHOOL OF PHARMACY,

24 NEWINGTON, LIVERPOOL.

Principal—Mr. J. S. WARD, Ph. Ch., F.C.S., &c.

COMMITTEE OF EDUCATION

(Appointed by the Council of the Liverpool Chemists' Association).

Mr. C. SYMES, Ph.D., President of the Association.

" T. F. ABRAHAM.

" M. CONROY, F.C.S., Vice Presidents.

" A. C. ABRAHAM, F.C.S., F.I.C., Member of the Council of the Pharmaceutical Society.

The Curriculum of this School has been submitted to the Council of the Liverpool Chemists' Association, and is approved of and recommended by that body, whose object in associating itself with the school is to ensure that a thoroughly efficient Pharmaceutical Education may be obtainable in Liverpool, and for this purpose the above committee has been appointed to visit the school from time to time, and otherwise control the course of study.

The success of this School is phenomenal.

The next Course will commence on Monday, April 14.

Syllabus, Pass-lists, Fees, &c., sent free on application to the Principal.

LONDON HOMŒOPATHIC HOSPITAL AND MEDICAL SCHOOL, GREAT ORMOND STREET, BLOOMSBURY, W.C.*President—THE LORD ERURY. Chairman—MAJOR WM. VAUGHAN MORGAN.*

Contains 90 Beds, and being entirely supported by Voluntary Contributions, Donations and Annual Subscriptions are earnestly solicited. The Hospital is always open to the inspection of visitors, and Clinical Instruction is given in the Wards and Out-patient Department to Medical Students and Practitioners. It possesses a valuable Library of Homœopathic Publications, which Medical Men are invited to study. They are also invited to visit the Dispensary. The In-patients number over 700 annually; the Out-patients nearly 9,000 annually. The number of Patients treated since the inauguration in 1849 exceeds 215,000. It has a staff of 12 Nurses for Ward Nursing and Nursing Invalids at their residences.

G. A. CROSS, Secretary-Superintendent.

*Now Ready, Second Edition, Crown 8vo., price 5s.***A PRACTICAL MANUAL OF VENEREAL AND GENERATIVE DISEASES:**

Including SPERMATORRŒHA, PROSTATORRŒHA, IMPOTENŒ, and STERILITY in Both Sexes.

By M. K. HARGREAVES, M.D.

Assistant Physician to St. John's Hospital for Diseases of the Skin.

LONDON: R. KIMPTON, 162 WARDOUR STREET, LONDON, W.

"CONCILIO ET LABORE."

THE MANCHESTER COLLEGE OF PHARMACY,

125 & 227a OXFORD STREET, MANCHESTER.

At recent Examinations the undernamed results have been obtained, giving a pass list which will bear comparison with that of any other School:—

December, 1889.

MAJOR—Mr. T. L. HOLLELY.

" H. H. GOURIAY.

MINOR—Mr. J. S. GREENWOOD.

" WM. COOPER.

" S. L. WESTMACOTT.

" F. SLIGHT.

January, 1890.

MINOR—Mr. E. W. SLEATH.

" W. FURNESS.

" J. H. PARKER.

February, 1890.

MINOR—Mr. W. FOWLES.

" T. T. BROOK.

" F. FARRANT.

MAJOR—Mr. W. ASHTON.

PRIZE MEDAL, PARIS EXHIBITION, 1889.

ZUCCATO'S PATENT

TRYPOGRAPH**PRINT YOUR OWN NOTICES,**

Circulars, Price Lists, &c.

NEW MODEL 1888.

SIMPLE, CLEANLY, RELIABLE, CHEAP.

PAYS FOR ITSELF AFTER A FEW TIMES USING.

5,000 Copies can be produced from one writing. Is invaluable to Chemists and Druggists for the rapid production of Price Lists, Circulars, &c., &c. Full particulars, with specimens of work, Testimonials, &c., on application to the Manufacturers and Patentees—

ZUCCATO & WOLFF, 12 Charterhouse Street, London, E.C.

A Copy of this Supplement is inserted in every number issued of "The Chemist & Druggist."

The Chemist and Druggist

SUPPLEMENT

Businesses Wanted.
Businesses for Disposal.
Premises to Let.
Auction Sales.

SATURDAY, MARCH 15, 1890.

Partnerships.
Situations Vacant.
Situations Wanted.
Miscellaneous.

ADVERTISEMENTS for this Supplement can be received on FRIDAY MORNING, first post, though it is requested that these may be sent in as early in the week as possible.

EXCHANGE COLUMN ADVERTISEMENTS will appear on page 12 (bottom folio), and must be received not later than THURSDAY AT NOON, to appear in the next issue.

All Advertisements for this Supplement and Exchange Column must be prepaid. Remittances payable to EDWARD HALSE and crossed MARTIN & Co.

This Supplement will be given free to any Chemist and Druggist or Assistant who will call for it at 42 Cannon Street on Friday afternoon, or will be posted on Fridays to any one who sends an addressed postal wrapper.

OFFICES: 42 CANNON ST., LONDON, E.C.

CHEMISTS' TRANSFERS.

MESSRS. ORRIDGE & CO., 32 LUDGATE HILL, E.C.

CHEMISTS' TRANSFER AGENTS,

May be consulted at their Offices on matters of SALE, PURCHASE, and VALUATION.

The business conducted by Messrs. ORRIDGE & Co. has been known as a Transfer Agency since the year 1843, and is well known to all the leading firms in the Trade. VENDORS have the advantage of obtaining an opinion on value derived from extensive experience, and are in most cases enabled to avoid an infinity of trouble by making a selection from a list of applicants for purchase, with the view of submitting confidential particulars to those alone who are most likely to possess business qualifications and adequate means for investment. PURCHASERS who desire early information regarding eligible opportunities for entering business will greatly facilitate their object by describing clearly the class of connection they wish to obtain.

1.—£800.—LONDON, W.C.—Handsomely-fitted shop, situate in a main thoroughfare, in close proximity to several large hotels; returns over £850 yearly; full particulars furnished and inspection invited; about £800 required.

2.—£700.—LONDON (City).—Dispensing and Retail, with largely extended Postal business; returns about £700 yearly, with good profits; good stock; no residence; no Sunday business; price about £700.

3.—£750.—LONDON, S.W.—Dispensing and Light Retail; returns between £700 and £750; good profits; shop is well fitted, and good stock; large house, very convenient; business open to the fullest investigation; will be sold at a lump sum, or valuation if preferred.

4.—£500.—LONDON, N.—General Retail and Dispensing Business, situate in a good business locality, with Post Office attached, the salary of which pays rent; large and well-fitted shop; good stock; returns nearly £500; good 8-roomed house with garden; price £400.

5.—£400.—LONDON SUBURB, S.W.—Very large and handsome shop, with good stock; present returns at the rate of £400 yearly under an assistant; vendor will sell at less than the value of stock and fixtures; full investigation permitted.

6.—£800.—LONDON, S.E.—In a busy locality; well-fitted shop, with exceptionally good stock; returns nearly £800 yearly, with good profits; good 8-roomed house, with private entrance; capital opportunity for a good pushing man; price £750.

7.—£554.—LONDON SUBURB, W.—Select locality; good-class Retail and Dispensing Business; returns last year £554, with large profits; well-fitted shop and good stock; convenient house attached; about £450 required.

8.—£600.—WEST OF ENGLAND.—Watering-place; Retail and Dispensing Business, held by vendor many years; returns £600 yearly; profits large; large house, private entrance; corner position; price £550.

9.—£800.—SURREY.—Attractive locality; first-class Business; returns £800 yearly, profit above the average; handsomely-fitted shop; very good house, with garden and stable; price about £750.

10.—£400.—MIDLANDS.—Large commercial town; good-class Business, in a suburban district; returns £400 yearly; well-fitted shop with good stock; good house, held on lease; full investigation permitted; price to be arranged equitably.

11.—£500.—SEASIDE (South).—Very pretty and fashionable town; established Business; returns between £450 and £500; can easily be increased; at present managed by an assistant; price about one year's returns.

12.—£700.—WESTERN COUNTY.—Large town; Main and Branch Business, returning about £700 yearly; easily worked, and admitting of extension; particulars on application; price required about £455.

13.—£1,400.—WALES.—Mixed Business, with Retail and Stationery; returns £1,400 yearly; very profitable, and admitting considerable extension; good 10-roomed house, lease if wished; price £850.

14.—£500.—WALES.—Seaport; Retail and Dispensing Business; well-fitted single-fronted shop and good stock; very moderate rent; lease if required; returns about £500; price about £400.

Particulars of any of the above will be furnished on application.

N.B.—NO CHARGE TO PURCHASERS.

Other Businesses, Town and Country; particulars free on application. Personal applicants receive Messrs. O. & Co.'s direct attention and advice, where required, free.

TERMS FOR VALUATION ON APPLICATION. APPOINTMENTS BY POST OR WIRE HAVE IMMEDIATE ATTENTION.

Messrs. ORRIDGE & Co. invite communications from COLONIAL and FOREIGN firms where business of a confidential nature requires the especial attention of a London agent.

SPECIAL NOTICE.—TO PRINCIPALS AND ASSISTANTS.

MESSRS. ORRIDGE & Co. Register Vacancies for Situations FREE OF CHARGE.

ORRIDGE & CO., 32 Ludgate Hill, LONDON, E.C.

F. J. BRETT, VALUER, LEICESTER, 60 St. Stephen's Road.

References to principal London and Provincial Wholesale Houses, also to numerous clients throughout the United Kingdom.

BUSINESSES THOROUGHLY INVESTIGATED FOR BUYERS. 20 YEARS' EXPERIENCE.

LINCOLNSHIRE.—Profitable Light Retail, Dispensing, Prescribing, and wood specialties in pleasant town; returns which are steadily increasing, £9 per week; good house, very low rent, lease; price £300.

LIVERPOOL (easy distance of).—Good class Retail and Dispensing; returns £400, increasing; 500 new prescriptions per annum; price, including glass house, &c., £385.

NOTTINGHAM (near).—Unopposed Retail and Prescribing; returns under Junior £4 week, can be doubled; price £105.

CORNWALL.—Unopposed profitable Retail; returns £450; rent and taxes nearly paid by agency; price £250.

LONDON, N.W.—Light Retail and Dispensing; returns £400; price £250.

LONDON, S.W.—Old-established Retail; exceptionally profitable; returns £520; price £350; open to offer.

LONDON, S.W.—Unopposed good-class Retail; returns £1,150, of which one third is in Gilbey's agency, in addition appointment worth £65 per annum; price £800.

BUSINESSES FOR DISPOSAL.

3s. 6d. for fifty words; 6d. for every 10 words beyond.

CHEMIST'S and Druggist's (Established 1811) close to King's Cross; rent only £73, £50 let off; satisfactory reasons for selling; price only £200, including everything; a genuine bargain. James W. Coade, 152 Southampton Row, W.O.

£275 for a Genuine old established Business in Surrey, doing £500 cash; owner having the offer of his old business in the country, will dispose of this much below its value to an immediate cash buyer; every information by letter. "Chemicus," 52 Rodwell Road, East Dulwich, S.E.

BUSINESS in the country for immediate disposal; turnover £350 per annum; business increasing, and with proper attention may be doubled; full inquiries and investigation invited. What offers? Address, "Chemicus," care of Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

SPLENDID opening offers in a rapidly increasing town, a few miles south of London; rent £45; no opposition near; good house and premises; stock and fixtures at valuation, under £200; an energetic business man will do £12 weekly. Particulars of Messrs. Berdoe & Co., 30 Jewry Street, Aldgate, City.

AN old-established Chemist's and Druggist's Business for disposal; death of proprietor sole reason for sale; stock and fixtures at a valuation; handsome plate-glass, double front, and large shop; rent low; agricultural neighbourhood; good opening for a pushing man. Exors. of the late J. H. Elmitt, 17 Bull Ring.

A SMALL Dispensing Business in London suburb, S.W. for sale; returns about £25 a month; half dispensing; neighbourhood will increase; good house and garden, could let off; rent £50 yearly; price £200; stock and fixtures cost £400; proprietor has larger business. Apply to T. W., 150 Victoria Street, Pimlico.

FOR immediate disposal, in consequence of illness, a small Business, well situated in prosperous watering-place on East Coast; an energetic young man, with small means, would find this a good opening, as it can be purchased on most reasonable terms. For particulars apply to Grimwade, Ridley & Co., Wholesale Druggists, Ipswich.

UNDER exceptional circumstances; Prescribing and Dispensing Business in a rapidly increasing watering-place on the east coast; Gilbey's Agency attached; good house, overlooking pleasure gardens and parade; splendid opportunity for a good prescriber; returns about £750; price £700; no agents. "Ajax," Hirst, Brooke & Hirst, Leeds.

UNOPPOSED Business in a village town in Hertfordshire on Midland Railway; population over 2,000, with good surrounding district; capable of great increase; average returns under management since first opened a few months since over £300; plate-glass window and attractive shop. Apply, "Sigma," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

BIRMINGHAM (Suburb).—Light Retail, Dispensing and Prescribing Business, situated in a prominent corner position in one of the best suburbs; rent £30, worth £50; excellent house, bath-room, &c.; returns £150, steadily increasing; price £550; stock and fixtures worth £100. "Sodium," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

MIDDLESEX (about 12 miles from London).—A profitable Retail and Dispensing Business; returns about £280, can be easily increased; growing neighbourhood; good house, large garden; moderate terms; for immediate sale; capital opening for Dentistry. Apply, letter only, R. D., care of Messrs. Brodie & Co., 1 Canfield Gardens, Hampstead, N.W.

LONDON, N. Light Retail, Dispensing, and Prescribing Business; few miles out of London; capable of considerable increase in the hands of an energetic principal; rent moderate. Apply, 109 St. James' Road, Holloway, N.

CHEMIST'S Shop, with House, to Let; kitchen on ground-floor, sitting and three bedrooms; superb fixtures; established 12 years; population 7,000; no competition; rent £20. Apply 52 Leeds Road, Windhill, Shipley, Yorks.

SYDENHAM.—A small Retail and Dispensing Business; shop well fitted and stocked; good house; full particulars on application; personal investigation invited; no reasonable offer refused; good opening for dentistry. Dawson, 45 High Street, Sydenham.

TO Chemists and Druggists.—For sale, in consequence of the death of the proprietor, an old-established Business in one of the leading thoroughfares of Maidstone, near railway-station. First-rate shop, with dwelling-house. Apply to Day & Sons, Valuers, &c., 23 High Street, Maidstone.

PLYMOUTH.—Old-established, Good-class Retail and Dispensing Business; in same hands 30 years; very desirable position in the principal thoroughfare; returns £600; good stock and handsomely-fitted shop; price £500 or offer. For full particulars, write A.B., care of Messrs. Barron, Harvey & Co, Gillsur Street, London.

CHEMIST'S Business, in Improving and fashionable watering place, Devon, for immediate sale, in consequence of sudden death of proprietor; splendid opportunity if Dentistry combined; none resident in the town; leading street; stock and fixtures new; low valuation; no reasonable offer refused. Apply, D., 3 Castle Park Terrace, Exmouth.

HANDSOMELY fitted well-stocked Pharmacy, recently fitted; large new neighbourhood, rapidly increasing; returning, under junior, £6 per week; must return £1,000 shortly under principal; good house, rent £55, let off £48; satisfactory reason given for sale; price about £320, part can remain; trial allowed. Address, "Zingih," 56 Norfolk Rd., Dalston, E.

DRUGGIST'S and Dentist's (old established) Business at 1 Charles Street, Bentinck Terrace, Regent's Park, N.W., has from circumstances been closed, and the Shop and good six-roomed House is to Let at moderate rental of £40. Apply on the premises. Stock, Drugs, &c., may be had at very moderate price to establish good business in a pleasant wealthy district.

S.E.—Old-established Retail and Prescribing; very profitable; exchanged hands once in 27 years; returning, under junior, £450; rapidly increasing neighbourhood; principals gone into another trade cause of sale; £300, or reasonable offer, part can remain; trial allowed; 9-roomed house, net rent £18. "Rhel," 59 Ashmore Road, Harrow Road, W.

£300.—Twenty miles out, in an increasing town of 12,000 inhabitants; always under manager; returns nearly £500; good profits, and capable of considerable extension under principal; good house in principal street, well fitted and stocked; £300 only to immediate purchaser. N., Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

IMMEDIATE.—Old-established Light Retail; beautifully situated; county market town; population 8,000; two chemists; large double-fronted shop; rent £16; gentleman with about £200 treated with. N.B.—This business offers exceptional advantages for Dentistry and general extension; a fortune to good business man. "Proprietor," 42 Oastle Street, Sbrewsbury.

SMALL Family and Agricultural Business at seaside; profits £135, steadily increasing; several good paying proprietaries, which are in large demand in the district; no cutting patents; good house; rent £21; satisfactory reasons for disposal; every investigation allowed; price £250 (valuation £290). "Proprietor," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

EXCEPTIONAL chance; returns under bad management nearly £1,000; densely populated manufacturing town in North Staffordshire; Prescribing, Retail, and Agricultural; easily doubled with personal attention; good house and easy rental; qualification immaterial; vendor, having other means, will accept £450. "Cicero," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

BUSINESSES WANTED.

3s. 6d. for fifty words; 6d. for every 10 words beyond.

WANTED. Retail and Dispensing Business, in small town or large village, returning £500 to £700; no objection to Mixed Business; Midlands or South preferred; must bear investigation. Full particulars to "Cash," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

WANTED to purchase a Light Retail, Dispensing and Prescribing Business in one of the home counties (preferred), returning £500 to £700; would not object to small town or village. Replies (please give all particulars) in confidence to A. H. T., Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

WANTED, a small Business; one that has been neglected, but with attention capable of improvement, not objected to; seaside or Channel Islands preferred; no agents. Address, giving all particulars, in strict confidence, to "Jersey," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

BONUS of £2 will be given to anyone informing advertiser of a locality with fair opening for Chemist with moderate capital (if information is accepted); large village not objected to; Midlands or South preferred; all communications received in strict confidence. Address, "Bonus," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

TO LET.

3s. 6d. for fifty words; 6d. for every 10 words beyond.

TO BE LET OR SOLD, a superior House and Shop in main thoroughfare, Southend-on-Sea; suitable for a Chemist, there being none in the immediate locality of a considerable population. Apply to Messrs. Tolhurst & Son, Solicitors, Southend-on-Sea.

TO LET, a newly-built House, in one of the main thoroughfares of Maidstone, Kent, suitable for a chemist; no other in the same street. John Goodbody, "Dog and Gun," Boxley Road, Maidstone.

APPRENTICESHIP.

3s. 6d. for fifty words; 6d. for every 10 words beyond.

APPRENTICE—Vacancy open at The Pharmacy, Burnham, Somerset; moderate premium; good home. F. E. Carpenter having an Agricultural Business, as well as the Light Retail and Dispensing, every opportunity is given to a sharp youth to learn both branches of the trade thoroughly; time for study allowed.

SITUATIONS OPEN.

3s. 6d. for fifty words; 6d. for every 10 words beyond.

WANTED, a good Junior, by March 31, for Retail and Dispensing business; indoors. Harris, Chemist, Taunton.

IMMEDIATELY, a Junior, to take charge of a small Branch; indoors. Apply, with usual particulars, to F. G. Wrack, Chemist, Bridlington.

JUNIOR or Improver in a Select Retail and Dispensing Business. Full particulars, enclosing photo, to Frederick James Lea, The Folkestone Pharmacy, Folkestone.

WANTED, Manager; married; registered; tooth extractor; good prescriber; well up in general trade; to live on premises. P., 10 Hawkshead Street, Southport.

PART Board and Lodging offered in return for a few hours' Assistance weekly (middle aged man preferred). Apply by letter to Lucas, 45 Watlington Road, Harrow Road, W.

WANTED, immediately, an Improver, to assist generally in a Chemist's and Wine Merchant's business; time for study. State full particulars to Mr. G. Hubbard, Downham Market.

OUTDOORS.—Immediately, Junior Assistant for counter, and also a Qualified Dispenser. State age, height, salary, enclose last two references and photo, to S. Waud, Chemist, Leicester.

WHOLESALE.—Clerk required about 18 or 20 years of age, accustomed to bookkeeping. Apply, stating age, salary, and experience, to "Ledger," care of H. Good & Son, 12 Moorgate Street, E.C.

JUNIOR Invoice Clerk wanted in a Wholesale Druggist's; will require to be a smart penman and quick at figures. Reply, stating age, experience, &c., to "Senega," care of C. Birchall, Advertising Agent, Liverpool.

QUALIFIED Assistant wanted for a large West End establishment. State age, references, and salary (outdoors) required, or apply personally, before 11 o'clock, to Drug Department, York House, Regent Street, S.W.

DISPENSER; a Junior Assistant with good experience; no Sunday or night duty; hours 8 till 8; outdoors; two hours allowed for meals. Apply personally, or by letter, with full particulars, to "Chemist," 23 Trevor Square.

WANTED, Improver (or one who has served a part apprenticeship) in a good business in a manufacturing town; must have good reference. Apply, stating full particulars with application, to Mr. Prince, Chemist, Longton, Staffs.

WANTED, immediately, Junior Assistant, about 18; must be active and energetic and of agreeable manners. Send full particulars, salary, photo, and references, to J. & J. Thompson & Co. (Limited), 192 Manchester Street, Oldham.

WANTED, competent qualified Assistant. Wilkinson, Hemel Hempstead, Herts.

WANTED, Junior Assistant; mixed business. George Exley & Son, 34 Hunslet Lane, Leeds.

WANTED, a Junior Assistant for a Mixed country trade. Apply J. Smith, Chemist, Llucohn.

WANTED, a Junior Assistant; energetic, good counterman. Apply, with particulars, P. J. Harrington, Middlesbrough.

WHOLESALE.—Wanted, a Young Man to look after town orders being executed. Apply, stating age, salary required, and references, Raines & Co., York.

JUNIOR Assistant for April 8, one with a slight knowledge of Mechanical Dentistry preferred. Apply, with full particulars, R., 27 Mill Street, Kidderminster.

AN Active, Qualified Assistant; good prescriber and dispenser; total abstainer: state age, height, salary, and reference, with photo, to S. Griffith, Pharmacist, Weston-super-Mare.

ASSISTANT wanted, for Bournemouth. State age, references, and salary required, and send photo, to B. B. B., Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

ASSISTANT, at once; aged 23 to 28; outdoors; no Sunday duty; references as to character and ability essential. Apply, with usual particulars, to G. R. Foulston, 46 Waterworks Street, Hull.

JUNIOR Assistant, of steady habits; active and obliging; accustomed to dispense and general retail; no Sunday duty. Apply, giving full particulars and reference, to D. Jenkins, Chemist, Bridgend.

WANTED, Junior Assistant (indoor); good counterman and dispenser; Mixed Business; Protestant and abstainer preferred; unexceptionable references required; photo, to be returned. Apply, J. B., 32 Victoria Road, Widnes.

WANTED, an Assistant; unmarried; to sleep on premises; board out; good salesman and fully competent to dispense. Apply, giving full particulars, and state salary expected; enclose C. D. V. Kiloh & Co. (Limited), Cork.

INVOICE Clerk wanted for wholesale drug house in London; must be good writer and quick at figures. Apply, stating experience and salary required, to "Gresley," care of Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

WANTED at once, a qualified Assistant, not under 25 years of age; must be a neat and accurate dispenser, and accustomed to a first-class country business. Apply, enclosing carte and references, to Carlton & Sons, Chemists, Horncastle.

IMMEDIATELY; competent Assistant (indoor), about 22, in good-class retail and dispensing business; one only kept; dwelling-house apart from business. State age, salary required, and usual particulars, also when disengaged, to T. Fox, Great Malver.

IMMEDIATE.—Qualified Assistant (indoor); good personal appearance and obliging manner; hours 8 to 10 alternate Sunday evening duty; Prescriber and Tooth Extractor. Reference as to ability, character, height, and salary, with photo, Adams, Horusey, N.

WANTED, at once, a Junior Assistant for a country town in North Wales; must be a good dispenser and have a knowledge of the Welsh language. Address, stating salary required and full particulars, to D. H., care of J. Thompson, 58 Hanover Street, Liverpool.

WANTED, a first-class Manager (qualified) for a high-class Drug store in Town; must possess excellent references; salary to commence £100, with apartments; single man preferred. Apply to B., care of Messrs. Davy & Yates, 64 Park Street, Southwark, S.E.

IMMEDIATELY, in London.—A competent Assistant; must be qualified, of good appearance and address, and have a practical knowledge of surgical and mechanical dentistry. Apply, stating age, height, references, and salary required, to W. F. Bartle, Glencoe, Crescent Road, Bournemouth (West).

IMMEDIATELY, a Qualified Manager, of good address, for a high-class Dispensing business in the West of England; a liberal salary is offered to a gentleman of experience who seeks a permanent situation. Address reply, stating full particulars, to "Manager," care of Evans, Gadd & Co., Exeter.

WANTED, young man to take charge of a Chemical Apparatus Department in a wholesale drug house in Canada; must have a thorough knowledge of these goods; references as to character and ability required. Apply, stating past experience and salary expected, to "Chemical Glass," P.O. Drawer 2,050, Montreal, Canada.

WANTED, a young Pharmaceutical Chemist as Assistant in a large Chemical Factory; must have thorough practical experience in the manufacture of high-class pharmaceutical preparations, and in conducting chemical analyses; commencing salary £100 per annum. Address by letter, W. A. Y. P., care of Crossley, Mole & Co., Advertising Agents, 57A Coleman Street, E.C.

A COMPETENT Assistant, accustomed to a good-class Dispensing, Family, and Agricultural trade; must be a quick and accurate Dispenser; short hours; apprentices kept. Apply, with usual particulars, enclosing carte de visite, if convenient, to J. Meredith, Chemist and Wine Merchant, Brecon.

JUNIOR Assistant; accustomed to Dispensing and General Retail business; must be quick, active, and obliging; references must bear every investigation; comfortable home offered. Send carte, to be returned. Apply, "Cbeallens," Hodgkinsons, Prestons & King, 81 Bishopsgate Street Without, E.C.

WANTED at once, an Improver or Turnover Apprentice, accustomed to Dispensing and Counter, of good appearance, and possessing undeniable references; business is in healthy neighbourhood, by the sea. Apply, stating age, salary required (outdoor), and full particulars, enclosing carte, to Mackereth, Grange-over-Sands.

IMEDIATELY, Assistant to Manago Branch; must have first-class reference, both as to ability and character, be well up in Prescribing; if able to extract teeth preferred; apartments provided; salary and commission. Apply to J. Edmunds, Chemist and Surgeon-Dentist, 47 Fernhead Road, St. Peter's Park, Paddington, W.

NEAR Town.—Wanted, a qualified Assistant, about 25 years of age; experienced in good-class Retail and Dispensing, and competent to take sole charge in occasional absence of the principal; also a good Junior seeking a permanency. Address, with full particulars, Z. A., care of Messrs. Edwards & Sons, Queen Victoria Street, E.C.

SITUATIONS WANTED.

1s. for twelve words; 6d. for every six words beyond.

JUNIOR or Dispenser to Surgeon; London; aged 21. W. H. A., 28 Chippenharn Road, W.

ASSISTANT; good experience; competent; aged 25. T. Cockshott 159 Woodhouse Lane, Leeds.

ASSISTANT (23); good experience; disengaged; London preferred. Ferrum, 225 Marylebone Road, N.W.

ASSISTANT (25); good references; Manchester preferred. "Alpha," care of 24 Erskine Street, Liverpool.

ENERGETIC Assistant, not qualified; 20 years' experience; single; 35. "Statim," 12 Chapel Street, Uxbridge.

AS Dispenser to a medical gentleman by a young man (21); salary no object. Surveyor, Hinstock, Market Drayton.

MANAGEMENT, with view to succession preferred; married; 32; tall. T., 113 Riversdale Road, Highbury, N.

BRANCH Manager or Assistant (outdoors); 16 years' good-class experience. "Statim," 10 High Street, Horncastle.

ASSISTANT or Branch Manager; used to prescribing and country trade; aged 33 years; married. A. O., Warrington House, Lincoln.

LONDON; about April 15th; time for evening lectures; aged 20; 4½ years' experience. W. H., 1 Victoria Buildings, Rushden, Northants.

AS Junior Clerk in London (Wholesale); 7½ years' Retail experience; disengaged 2nd April. Address "Ogilvie," 39 St. Paul's Road, Canonbury, N.

AS Manager or Assistant, with view to purchase; married; aged 27; height 5 ft. 7 in.; Minor. "Chemist," 52 Florence Street, Newcastle, Staffs.

MINERAL WATERS.—Situation wanted by experienced man, as Working Foreman. O. N., 2 Frederick Place, Mason Street, Lambeth, S.E.

WANTED, by a respectable young man, a situation in Warehouse or Laboratory, used to Surgery work and Dispensing; aged 24; 10 years' good reference. G. T., 22 Ewell Road, Clapham, S.W.

ASSISTANT (25); Dispense, Prescribe, Extract; good all-round knowledge; time for lectures and study essential; low salary; disengaged at Easter. "Excelsior," 91 Crosby Street, Maryport.

CONFIDENTIAL or Branch Manager; end April or early in May; qualified by examination; aged 40; married; experience and references unexceptionable. "Ceto," Messrs. Balys Brothers, Wholesale Druggists, 4 Jewry Street, London.

TO Wholesale Druggists, Drysalts, &c.—A young man, with three years' laboratory experience in B.P. preparations and specialties, and some knowledge of wet counter, wants situation where he could enlarge his general and commercial knowledge of the trade, or as Laboratory Assistant. Address, K. A. Z., Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

IMEDIATELY, Assistant or Branch Manager (outdoor); good Prescriber, Dispenser, and Extractor; aged 32. Knibbs, 64 Mildmay Road, N.

TEMPORARY or Permanent; aged 23; extractor; height 5 ft. 10 in.; disengaged April 1. "Chemist," 32 Lamplit Vale, Lewisham.

AS Locum Tenens or Manager, or Town Traveller to Drug or Sundry House. "Coated," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

ENERGETIC Assistant; unqualified; 15 years' varied experience; Wholesale or Retail; married; aged 33. "Drugs," 41 Horsell Road, Highbury, N.

WHOLESALE.—A young man seeks an engagement as Traveller, Drugs or Sundries; 2½ years' experience; excellent references. Shuttleworth, Silver Street, Gainsborough.

PHARMACEUTICAL Chemist (24) wishes to hear of Position in a good business, Manufacturing or Retail, with a view to Partnership or Purchase. Address, H., Moreton House, Cheetham, Manchester.

MISCELLANEOUS.

Special charges are made for Advertisements under this heading, which can be obtained on application.

PROPRIETARY Articles.—Wanted to Purchase. Must show good profits. Apply, by letter, to J. S., care of Mr. Ponting, 40 Aldersgate Street, London, E.C.

PERSONS wishing to Purchase or Sell their Businesses will do well to communicate with Messrs. Fowler & Miller, Chemists' Transfer Agency for the North of England, 60 Fawcett Street, Sunderland.

PRELIMINARY AND MINOR.

ALL Students who are preparing should send for particulars of a method of study which will enable them to pass with ease. Enclose stamped envelope to Mr. J. Tully (Hills Prizeman), Chemist, Hastings. Established 1872. References to past and present Pupils. Student's Herbarium, 100 specimens, 7s. 6d., post free.

STUDENTS' AIDS TO EXAMINATION.

PRELIMINARY.—Arithmetic and Metric System, 1s. How to Write an Essay, 3d. Caesar Simplified, 1s. Knotty Points in Latin Grammar, 1s. 6d. MINOR.—Equations Simplified, 1s. Illegible Autographic Prescriptions, 1s. Notes on Dispensing, 1s. Prescriptions given at the Minor, 6d. "Chemist," care of Mr. J. Edwards, Wye, Kent.

GLYCERINE & CUCUMBER,

First Quality, 9d. per lb., by using

Rouse's Concentrated Cucumber Paste.

In Jars (free), ½ lb. 2s. 3d.; 1 lb. 4s. 3d. net.

Making 3 lbs. and 6 lbs., costing 1d. per oz., by simply adding Water and Glycerine.

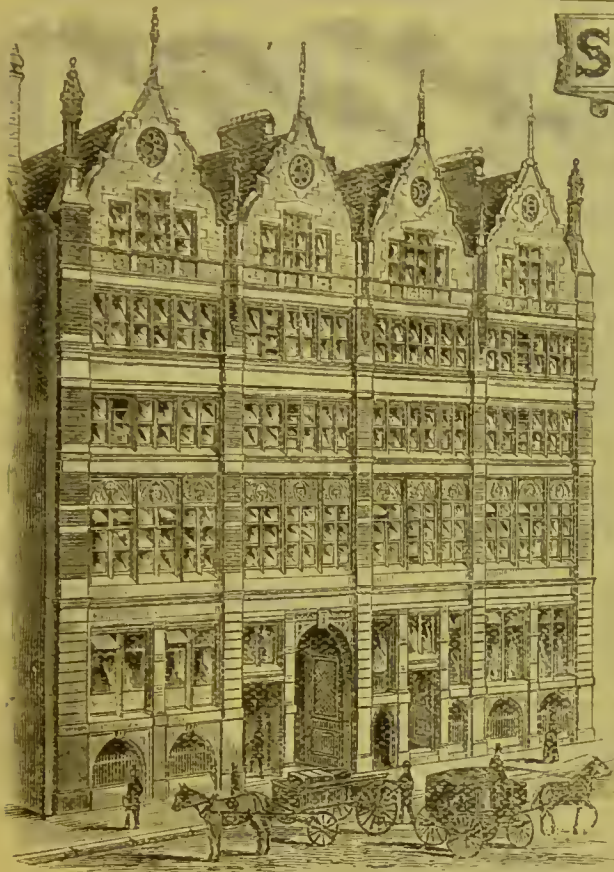
Thro' any Wholesale House, or post free for P.O.

ROUSE & CO., 12 WIGMORE ST., LONDON, W.

OUR WEEKLY SUPPLEMENT.

We have prepared a set of forms for small advertisements (assistants wanted, businesses for disposal, exchange column &c.). With these are attached tables of useful reference matter (Sale of Poisons, Postal Information, Annual Licences, Metric Weights, Measures, Medicine Stamps, Law and Public Offices, &c.). We shall be glad to send one of these sets to any subscriber who will send us an addressed postal wrapper (bearing a halfpenny stamp). As the object of this production is to encourage the insertion of such advertisements as we have named in THE CHEMIST AND DRUGGIST, we hope this offer will be taken advantage of chiefly by those subscribers who are willing to use this journal whenever opportunities occur.

OFFICES: 42 CANNON STREET, LONDON, E.C.



**S. MAW
SON & THOMPSON'S**



QUARTERLY
Price Current

AND

BOOK OF ILLUSTRATIONS

OF

SURGEONS' INSTRUMENTS

AND

DRUGGISTS' SUNDRIES

OF ALL KINDS

MAY BE HAD ON APPLICATION ENCLOSING
BUSINESS CARD.

Forwarded Post Free to all parts of the World.

S. MAW, SON & THOMPSON, 7 to 12 ALDERSGATE STREET, LONDON, E.C.

CHEMICAL AND SCIENTIFIC APPARATUS.

J. ORME & CO.

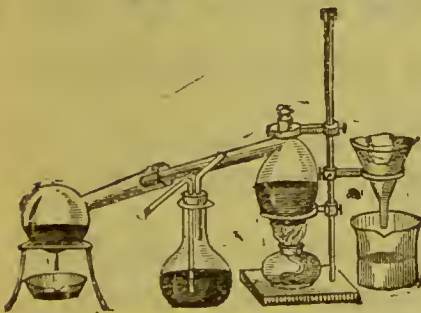
(Late M. JACKSON & CO.),

Manufacturers and Importers of every description
of Apparatus for Lecturers or Laboratory use.

By Appointment to H.M. Hon. Board of Inland Revenue, Science and
Art Department, Royal School of Mines, Trinity House,
Pharmaceutical Society, &c.

ILLUSTRATED PRICE LISTS ON APPLICATION.

65 BARBICAN. LONDON, E.C.



PATENTS, DESIGNS,

TRADE - MARKS.

BERNHARD DUKES,

226 High Holborn,
LONDON, W.C.

Undertakes all business relating to
PATENTS DESIGNS AND TRADE-MARKS.

PLEASE MENTION THIS PAPER WHEN APPLYING

Telegraphic Address:—
"APPLICANT LONDON"

ATTENDANCE IN THE PROVINCES.

F. H. BERRY,

18 Percival St., Clerkenwell, LONDON, E.C.

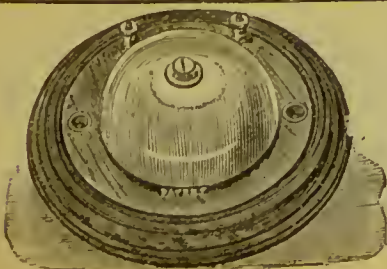
Wholesale Manufacturer of Electric Bells, Batteries,
Indicators, and Electric Apparatus of every description.
Specialties in Electric Wires and Cables for
all purposes.

SOLE MANUFACTURER OF

BERRY'S PATENT ELECTRIC BELL.

THE BEST AND CHEAPEST EVER PRODUCED.

Apply for Price List and Opinions of the Press. [2]



BARCLAY & SONS, LIMITED

ESTABLISHED



OVER A CENTURY.

PATENT MEDICINE DEALERS AND PROPRIETORS.

DRUGGISTS' SUNDRIES & SURGICAL INSTRUMENTS

MANUFACTURERS AND DEALERS.

EXPORT ORDERS Carefully and Promptly Executed on the most Favourable Terms.
QUOTATIONS FURNISHED. AGENCIES UNDERTAKEN.

SHOW ROOM AND WAREHOUSES—
95 FARRINGDON STREET, LONDON.

JOHN SANGER & SONS

Patent Medicine Vendors,
DEALERS IN
DRUGGISTS' SUNDRIES,
LOZENGES,



Mineral Waters, Perfumery
And TOILET REQUISITES.

ILLUSTRATED PRICE LISTS SENT
FREE ON APPLICATION.

Sample Orders for Bronchitis Kettles, Chest Protectors, Hot Water Bottles, Respirators, &c., &c., will receive prompt attention, and doubtless ensure further orders.

Agencies of all kinds undertaken upon the most favourable terms.

Warehouse & Show Room: 489 OXFORD STREET, LONDON, W.

KEARSLEY'S Widow Welch's FEMALE PILLS.

These are universally acknowledged to be the Genuine, and Druggists may safely recommend them.

CAUTION!

The Proprietors of Kearsley's Original Widow Welch's Female Pills find it incumbent on them to caution the purchasers of these Pills against various imitations by parties who have no knowledge of their peculiar preparation, the Original Recipe having been sold to the late G. Kearsley, of Fleet Street, whose Widow found it necessary to make an affidavit, for the protection of her property, in the year 1798. The Genuine Recipe for Widow Welch's Female Pills has been prepared by them for 100 Years! Chemists are particularly requested to remark that, as a testimony of authenticity, each bill of directions contains an affidavit, and bears the signature of "C. KEARSLEY," in writing, also engraved on the Government Stamp, and each box is wrapped in WHITE paper.

Price 27s. per Dozen, subject to usual Discount. Special Quotations to Shippers and for large quantities on application to

J. SANGER & SONS, 489 OXFORD STREET, LONDON, W.

Telegraphic Address—
"BEATROP LONDON."

NOW READY.

Telegraphic Address—
"BEATROP LONDON."

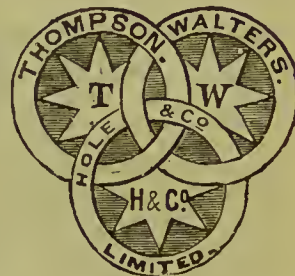
THOMPSON, WALTERS, HOLE & CO.'S

REVISED ILLUSTRATED

CATALOGUE

FOR **1890** OF

DRUGGISTS' SUNDRIES



SURGICAL INSTRUMENTS

SHOW CASES

SHOP FITTINGS



PERFUMERY

TOILET REQUISITES

PATENT MEDICINES

FORWARDED POST FREE ON APPLICATION TO ANY PART OF THE WORLD.

SPECIAL TERMS FOR EXPORT AND WHOLESALE ORDERS.

Every attention is given to Export Orders, and Indents sent through Merchants should bear our name.

Our goods give universal satisfaction, and buyers may, with confidence, favour us with a trial order, and be assured of the most satisfactory results.

THOMPSON, WALTERS, HOLE & CO., LIMITED
CURTAIN ROAD, LONDON, E.C.

EXCHANGE COLUMN.

FOR DISPOSAL

Proprietary Articles.

3s. and 5s. Ed. Dobson's Black leg drinks; no reasonable offer refused. 26/29.

Formulæ.

Recipe for self-raising flour; satisfaction guaranteed; 18 stamps. 23/41.

Reliable recipes, 6d. each; full set of 130 neatly copied in book, 7s. 6d.; send for list. "Chemist," Edwards, Wye, Kent.

Manxland Bouquet, similar to the most celebrated of the Isle of Man perfumes; by a native; sample free 2 stamps; copy of recipe, 5s. 29/2.

Brooks' Recipes.—All practical; easily made; pay splendidly.—Toothache cure, seldom fails; Blood Cleanser, excellent preparation; Hop Tonic, costs 1s. 1b.; Herbalife, fine aroma, appetising and digestive; Jubilee Sauce, mellow, piquant, appetising, digestive, 6d. pint; Pig Powders, best sold; Ringworm Specific, never fails; Influenza Mixture, sold with confidence; Nursery Lotion (non-poisonous), certain death to nits, &c. Recipes 7d. each, 3 for 1s. 6d.; post free also list of 400. Tom Brooks, Chemist, Hornsey, N.

Literature.

What offer for Cassell's "Family Physician," 4 vols.; special edition? 27/38.

What offers? 8 volumes *Chemist and Druggist*, with Diaries. Andrew, Madeley, Salop.

Are the *Pharmaceutical Journals* from No. 1 to the present time, bound and unbound, of any value? G. S. Simpkins, Stourbridge.

Journals of the *Society of Chemical Industry* for 1886, 1887, 1888, and 1889; highest offer in cash accepted. Fletcher, 11 Abbey Walk, Grimsby.

What offers for *Chemist and Druggist*, 1876 to 1879, and 1881 to 1888, 3 or 4 numbers missing. Apply, W. Willey, Chemist, 253 Cleethorpe Road, Grimsby.

Chemist and Druggist, unbound, 1878, 1881, 1882, 1883, 1884, 1885, 1886, 1887, 1888 (two numbers short), six and seven months 1879, 1880; lot 20s. Hartley, Chemist, Todmorden.

"Year Book Pharmacy," 1870 to 1882, quite clean; "Progress of Pharmacy," Bentley and Redwood; Lindley's "School of Botany," 13th edition; Bentley's "Botany," 3rd edition; offers. Guest, Brentwood.

What offers?—For sale, "Year Book of Pharmacy," 8 vols. 1873 to 1880; also 31 vols. *Pharmaceutical Journal*, vols. 7 to 17, and 1 to 9 new series, in green cloth, 1870 to 1881 vols. in half calf. Apply to F. Thompson, 20 High Street, Bedford.

Shop Fittings.

Handsome open window screen; mahogany dispensing screen, very low price. Sangster, Hampstead.

Fittings, Bottles, &c., to be disposed of; will suit shop or open surgery. Apply S., 13 Great Russell Street, W.C.

Mahogany and plate glass upright floor showcase, with moveable shelves, excellent condition, 6 ft. by 2 ft. 7 in. by 11½ in.; cost 81. 15s., take 41. 15s.; also Chappuis' daylight reflector, and Enterprise tincture press. Particulars, S., Market Place, Stroud.

Glass bottles, job lines.—About 50 gross 3-oz. pale green bottles for corks, suitable for pomade, vaseline, or furniture cream, 4s. per gross; 3 gross 1-pint (reputed) green glass syrups, 7s.; 2 gross pint ditto, 15s.; 3 gross 1-pint white glass syrups, 20s.; 3 gross 2-oz. white globe-necked panels, 7s. Hearn, Bottle Works, 381 Kingsland Road, London.

Counter-case, Lent plate-glass, as Maw's A 18, measures 8 ft. long, price 71. 10s.; also 5 ft. to match, price 51.; both as good as new. Philip Josephs, 54 Old Street, Goswell Road, London, E.C.

Counters.—One 12 ft. long, solid mahogany, with plate-glass doors in front, quite modern and handsome, price 121. 10s.; also 6-ft. counter, with solid mahogany front and top, price 60. Philip Josephs, 54 Old Street, Goswell Road, E.C.

Drawers.—20 nests, from 2 ft. to 12 ft. long, with glass labels and glass knobs; great bargains. Philip Josephs, 54 Old Street, Goswell Road.

Black store bottle, with caps and gold labels, stand 14½ in. high, price 1s. each; also, a lot of second-hand shop-rounds cheap. Philip Josephs, 54 Old Street, Goswell Road.

Dispensing screen, very handsome, 6 ft. long, price 71. 10s., and two first-class sponge cases, 51. and 61. each. Philip Josephs, 54 Old Street, Goswell Road, London, E.C.

12 dozen imperial fire hand grenades, half invoice price; 12 Sugg's patent burners, in good order, with cpal shades and supports; 2 Wenham burners, without glasses; 2 Westech ditto, and 1 Diamond burner; mantles only required; all above at less than half-price. *Chemist and Druggist and Pharmaceutical* for last 15 years, first offer taken; "Enterprise" drug press, Bracher's automatic still, and nickel pellet-mould; all good as new; useful exchange entertained. Brearey, Douglas, Man.

1 31-in. specie jar, total height, scroll label, ornamental glass cover, 11. 15s.; 2 23 in. specie jars, Royal arms, ornamental metal covers, and mahogany plinths, 41.; 4 16½-in. high ditto, ornamental scroll labels, flat japanned covers, each 7s.; 1 30-in. ditto, Royal arms, glass gilt cover, 21. 17s. 6d.; 1 30-in. ditto, phoenix, glass gilt cover, 21. 5s.; 1 16-gall. carboy, cnt stopper, 11. 15s.; 1 12-gall. ditto, 11. 5s.; 17 1-gall. green carboys, gold labels, large japanned caps, stoppered, 4 3-quart ditto, 11. 10s.; several nests of drawers. W. Hawke & Son, Shop Fitters, Wild Court, Great Wild St., London.

Glass bottles; following surplus lines cheap:—Square ciphers, 6 doz. 2-oz., 3 doz. 4-oz., for 3s.; best oval dispensing, stamped "Slight, Lincoln," 4 doz. 16-oz., 3 doz. 12-oz., 4 doz. 8-oz., 7 doz. 6-oz., 7s. gross all round; blue castor-oils, 3 doz. 22-oz., 3 doz. 16-oz., 2 doz. 12-oz., for 10s.; long-neck lavender, white, 4 doz. 2-oz., 2 doz. 1 cz., 2 doz. ½ oz., for 3s.; square Oldham essence, 8 doz. 1-oz., 3 doz. 3-oz., for 4s.; acetic poison flats, 2 doz. 4 oz., 2 doz. 1½ cz., 3 doz. 2-oz., for 2s.; blue poisons, 10 doz. altogether, 1-oz., 2-oz., 3-oz., 4-oz., for 2s. 6d.; round essence, glass sprinkler taps, 2½ doz. ½ cz. and 1½ cz., for 1s. 6d.; blue citrates, not stoppered, 3 doz. 8-oz., for 1s. 6d.; direct squares, 3 doz. 16 cz., 1 doz. 8-oz., for 2s.; packages free; no carriage. Kemp & Son, Newcastle.

For Sale.—Bargains.—All numbers refer to Maw's Illustrated List.—Wall cases: 8 ft. piano case, as A88, a bargain; 6 ft., as fig A83; ditto, 3 ft.; several others cheap. Elkanah Natali, 207 Old Street, Shoreditch.

Dispensing screens, as A54, 3 ft., 4 ft., 5 ft.; as A55, 5 ft., 6 ft., 7 ft., and 8 ft., at very low prices; screens, with silver plate-glass centre and cases at each side, with tablets on top "Dispensing Department," 3 shelves at back entire length, 5 ft., 6 ft., 6 ft. 6 in., 7 ft., 8 ft.; sketch on application. Elkanah Natali, 207 Old Street, Shoreditch.

Counter cases, A18, 5 ft., 5 ft. 10 in., 6 ft., 6 ft. 10 in., cheap; as A16, 4 ft. 8 in., three 3 ft. 1 in.; do., 4 ft. 6 in.; do., 4 ft. 1 in., 2 ft. 5 in., cheap; several others at low prices. Mahogany and plate-glass desk and cases, from 45s. to 65s.; counter case, as A15, 2 ft. long, 5 ft. 7 in. long; tooth brush cases, as A9 and A10, cheap; sponge cases, as A41, cheap; show stand, with 3 plate-glass shelves, as fig. 3, 4, 5, and 6, at low prices. Elkanah Natali, 207 Old Street, Shoreditch. No connection with any house of same name.

Specie jars, from 18 in. to 33 in., royal arms; dispensing scales, as fig. 7; pill machines, ointment jars, pink and blue, bottles, mortars, at low prices; 17 ft. run of mahogany-fronted drawers, lockers, shelving, cornice, &c., 101. 10s.; wall fixtures, 12 ft., 16 ft., and 20 ft., cheap. Elkanah Natali, 207 Old Street, Shoreditch. No connection with any other house of the same name.

Miscellaneous.

Patent check till. State particulars and lowest price. Smith, Chemist, East Dereham.

About 34 doz. 2-oz. bears' grease pots, burnt-in labels (hine), 20s. lot; sample 3 stamps. 28/41.

5-gr. pill machine, 24, good condition, 10s. 6d.; Croley's "Cyclopadia," 8s. 6d. 4 Newstead Grove, Nottingham.

Microscope and condenser, in mahogany cabinet, by Wood, cost 31. 15s., used few times only, 11. 18s. 6d. Guest, Brentwood.

Microscopic slides, anatomical, pathological, interesting; lists and sample free. P., 233 Maida Vale, W.

Pair handsome specie jars, 24 in. high; good condition, cheap; "Enterprise" tincture press, 7s. 6d.; Milner's safe, 22×16×16. 27/39.

American ice-cream, soda, and fruit drink machine; complete, with 9 E. P. taps and all fittings; large soda cylinder, &c.; cheap; good investment. W. B. Smith, Gosport.

Cigars, 20 one hundred, choice Princesses, &c., cost 11s.; 10 one hundred, 10s. 6d., cost 13s. 6d.; 25 fifties, 6s. 3d., cost 8s.; in prime condition, to clear. Slater, Beeton Hill, Leeds.

Profitable.—10 doz. Florida sponges, fair quality and shape, sell 9d. to 1s., for 4s. 6d. doz.; sample 3, 1s. 3d. post free. Also six mammoth honeycomb, finest quality; good advertisement; 6s. 6d. to 7s. 6d. each; sent on approval. Brooks, Chemist, Hornsey, N.

Chemist's lamp, 18-inch globe, 2 by 5-inch ball's eyes, with reflectors, 2 gas lights, brass ball joint, handsome bracket; stand any weather; nearly new; cost 71., take 51.; 3 dozen Dobson's black leg drinks, 3s.; 1 dozen, 5s. 6d.; cash or exchange any reasonable offer; cyclostyle, nearly new; what offers? Carpenter, Pharmacy, Burnham, Somerset.

WANTED.

Small quantity Vipond's hemorrhoidal fruit pastilles, at once. Graham, Chemist, Girvan.

Mayhew's "Horse Doctor." State edition and price. Foggan, Chemist, Bedlington.

Twenty-four one-gallon black store bottles, japanned caps, gold labelled. "Chemist," 91 Canterbury Road, Kilburn.

Few copies of *The Chemist and Druggist* for January 5, 1889. Full price will be paid by the Publisher, Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

"PUMILINE."

The word "PUMILINE" is
G. & G. Stern's Registered Trade Mark

CAUTION!!!

The undersigned hereby give notice that the Trade Mark Protection Society is directed to instruct its Solicitors to take proceedings against any Chemist, Druggist or other person infringing their Registered Brands, Labels, or their Registered TRADE MARK, **"PUMILINE."**

Communications to be addressed to the Trade Mark Protection Society, 1 Furnival Street, Holborn, London.

62 Gray's Inn Road,
London, W.C.

G. & G. STERN.



BUY THE "LONDON MADE" SYPHON

AND SUPPORT BRITISH INDUSTRY.

It is the Cheapest, Strongest and Handsomest, and Best in the World

PRICE 1/6 EACH.

Send for Samples and compare. Coloured Syphons extra.

The above are without Saucer Base, but they can be had with the Drip Saucer, 1/8 each.

Nickel plating from 2½d. each, Silver plating from 4½d. each. Marking on Metal Tops free, but Die charged for at cost price. Marking on Glass by acid process, from 1d. each; steel plate for printing from charged extra, according to design; no charge, however, will be made for this plate for orders of 1,000 and over.

BARNETT & FOSTER,

NIAGARA WORKS,

26^T EAGLE WHARF ROAD, LONDON, N.

No charge for packing if ordered in our 1-doz. Boxes, with hinged lids, price 2/9 each.

REGISTERED
TRADE MARK
H.E. Constance



"INVIGORINE"

(REGISTERED TITLE).

THE NEW AERATED TONIC
Pleasant, Refreshing, and Invigorating.

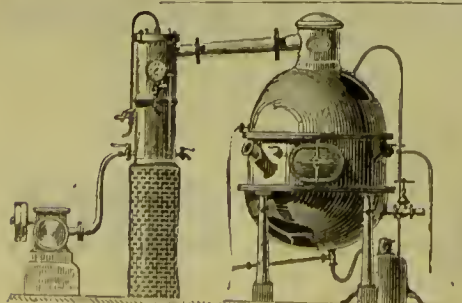
Successful Wherever Introduced
Specially Useful in Hot Climates.

Retail 2/6, Wholesale 24/- Doz. net,
Through the Wholesale Houses or of

THE "INVIGORINE" MANUFACTURING CO.
114 Leadenhall Street, LONDON, E.C.

APPARATUS for DISTILLING & CONCENTRATING in VACUUM

EGROT & GENEVOIX'S SYSTEM, PATENT.



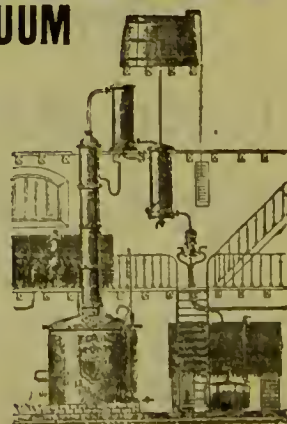
Egrot & Genevoix Apparatus.

STILLS & PANS FOR CHEMISTS,
DRUGGISTS, &c.
RECTIFYING APPARATUS
Egrot's System, Patent,
FOR BENZOLE, ETC.

EGROT, Chevalier of the Legion of Honour,
MANUFACTURING ENGINEER.
19, 21 & 23 RUE MATHIS, PARIS.
FIRM FOUNDED 1780.

PARIS EXHIBITION, 1839—Beyond Competition as
Member of Jury.

PRICE LIST FREE.



Rectifying Apparatus.

PURE ESSENCE LEMON

DIRECT FROM THE MAKERS.

SAVE INTERMEDIATE PROFITS AND BUY PURE ESSENCES!



W. J. BUSH & CO.'S ESSENCES OF LEMON AND ORANGE FACTORY.

By making the Essenees ourselves on the spot, we were enabled last season to offer to the Trade a quality that had never been seen before in this or any other market! Notwithstanding the great opposition we had to eneounter, combined with the somewhat libellous statements that were made by our competitors, both here and at Messina—caused through common jealousy—the trade has appreciated our efforts and our suceess in being able to offer them an Essence so superior in quality, that never before have we sold so large a quantity. Through this fact we are pleased to inform our friends that it has been necessary for us to take another manufactory in Villaggio Gazzi, Messina, which is no less than three times the size of the one in Strada Antico Cimitero, a portrait of which you will see above.

W. J. BUSH & CO., ARTILLERY LANE, LONDON.

"MYRTLE GROVE" TOBACCO

In 1-oz., 2-oz., and 4-oz. Packets, and $\frac{1}{4}$, $\frac{1}{2}$, 1 lb. Tins only.



TADDY & CO., 45 Minories, LONDON



ESTABLISHED 150 YEARS,

SNUFF, TOBACCO, AND SEGAR MANUFACTURERS.

Write for List of Specialities.



PASCALL'S GOLDEN MALTEX

MANUFACTURED UNDER PATENT NO. 1,566.

TITLE FULLY PROTECTED IN THE COLONIES.

Contains 25% of Allen & Hanburys' Extract of Malt.

PASCALL'S BLA-CUR-EX.

Composed of Black Currant Extract and Price's Glycerine.

NOVEL CONFECTIONS. MOST SALEABLE. DELICIOUS FLAVOUR. BRILLIANT AND ATTRACTIVE APPEARANCE. SELL AT SIGHT.

Vide Dr. Tanner's Report, and *The Chemist and Druggist*, April 20th, 1889.

Small Bottles containing about 6 oz., and 1-lb. Bottles

OF ALL WHOLESALE HOUSES, OR OF

JAS. PASCALL, Manufacturing Confectioner,
BLACKFRIARS ROAD, LONDON, S.E.

HUMPHREY DAVY & SON (LIM.)

MANUFACTURING CHEMISTS AND PERFUMERS,

WHOLESALE & EXPORT DRYSALTERS, OIL MERCHANTS & PACKERS,
MANUFACTURERS OF

FURNITURE CREAM, POLISHING PASTE, WRITING INKS, LIQUID BLUE,
KNIFE POLISH, PLATE POWDER, &c.

VICTORIA WORKS, Masbro Street, ROTHERHAM.



ROBINSON'S LIEBIG'S BEEF WINE.

Composed of Liebig's Extract of Beef, Extract of Malt,
and sound Port Wine.

REPORT ON BEEF WINES.

From the results of my Analyses of various Beef Wines I have had occasion to examine, none have equalled as regards strength, purity of ingredients, and (of no less importance) the skilful and judicious manner in which the respective ingredients have been proportioned and combined, the Liebig's Beef Wine manufactured by Mr. B. Robinson, of Pendleton, Manchester.

It is in every sense a reliable preparation, embodying in a pleasing and palatable form all the acknowledged medicinal and nutritive properties pertaining to Liebig's Extract of Meat, Extract of Malt, and sound Port Wine.

WILLIAM ELBORNE, F.C.S., F.L.S.,

Lecturer on Materia Medica in the Owens College, Manchester (Victoria University).
December 16, 1888.

ROBINSON'S ORANGE WINE.

Specialty prepared for Quinine Wine, does not deposit, will keep good in any climate, and well adapted for Export Trade. Supplied in Casks containing 9, 18, 30, 60, or 120 Gallons. Terms on application. [2]

PHARMACEUTICAL SHERRY WINE.

This Wine is well adapted for Pharmaceutical Preparations, and is the strength ordered by the B.P. Price, in 6-Gallon Casks, 5/8 per gallon; in 2-Gallon Jars, 6/- per gallon, carriage paid. Casks charged 7/6, Jars 2/6, and allowed if returned. Cash or satisfactory reference to accompany order.

B. ROBINSON, Distiller and Brewer of British Wines, Church St., Pendleton, Manchester.

146 MINORIES, LONDON E.C.
New York
Sydney
&c.

SODA WATER MACHINERY
AND ALL ACCESSORIES FOR THE TRADE

BRATBY & HINCHLIFFE LIM.

HEAD OFFICE
SANDFORD ST. ANCOATS, MANCHESTER

BOXES BOTTLES, MACHINERY,
ESSENCES.
*Catalogues, Circulars, Testimonials
Post Free*



SYPHONS & SELTZOGENES

GREAT REDUCTION IN PRICE.

We have recently been entrusted with a most important Agency for the above-named goods. Our Principals are the best known firm in Paris, and the Syphons are undoubtedly the cheapest and strongest in the market. The tops are made of pure English Tin, guaranteed free from lead. The Seltzogenes are made on the well-known "Fevre" system, and each one is thoroughly tested before being sent out.

WE CAN GIVE TO LARGE AND SMALL BUYERS EXCEPTIONALLY LOW PRICES.
PLEASE WRITE US AT ONCE FOR PRICES, STATING QUANTITY OF EACH KIND REQUIRED



SODA-WATER MACHINERY.

MELBOURNE EXHIBITION, 1889, UNPRECEDENTED SUCCESS.

We have obtained at the above Exhibition

3 HIGHEST AWARDS POSSIBLE

A feat never accomplished before by any other house supplying requirements for the Aërated Water Trade.

These awards will carry with them **THREE GOLD MEDALS**, which were awarded as follows:—

- 1st—SODA-WATER MACHINERY (Highest Award possible).
- 1st—ESSENTIAL OILS & FRUIT ESSENCES (Highest Award possible)
- 1st—PATENT AND ORDINARY BOTTLES (Highest Award possible).

WRITE FOR NEW ILLUSTRATED CATALOGUE, POST FREE.

BRATBY & HINCHLIFFE, LIM.

Aerated Water Engineers and Glass Bottle Manufacturers,

SANDFORD ST., ANCOATS, MANCHESTER

And at 146 MINORIES, LONDON, E.C.

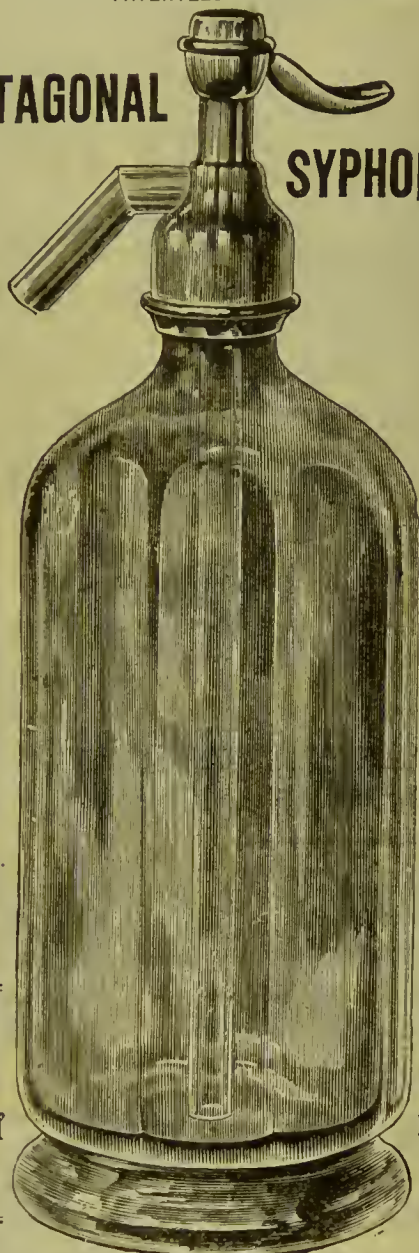
JAMES VIDIE ET FILS,

Pantin Glass Works,

PATENTEES OF THE

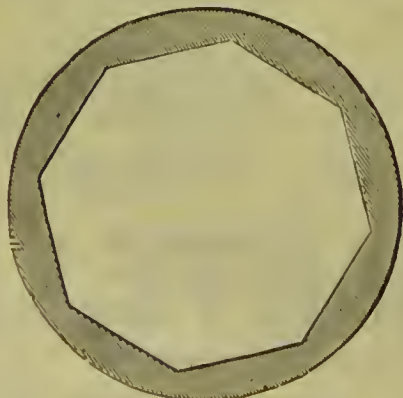
OCTAGONAL**SYPHON.**

The "Octagonal" is externally similar to the ordinary Syphon, the interior being blown of an octagonal shape by a new patent process.



Gives a most brilliant and sparkling appearance to the contents, and can resist double the pressure of ordinary Vases. Greatly recommend our new tint, "AZURE BLUE," which is the best tint for Syphon Vases.

SECTIONAL VIEW.



SOLE AGENT:

C. MELIN, 37 CRUTCHED FRIARS, LONDON, E.CTO BE HAD OF
ALL MINERAL WATER ENGINEERS.TO BE HAD OF
ALL MINERAL WATER ENGINEERS.**A WONDERFUL SUCCESS!!****NON-INTOXICATING BEER**

Made from MASON'S Original

EXTRACT of HERBS

(REGISTERED.)

Composed of Yarrow, Dandelion, Comfrey, & Horehound
ENLARGEMENT OF SIZE.A Sixpenny Bottle makes EIGHT GALLONS of
HERB OR BOTANIC BEER

A NON-INTOXICATING BEVERAGE

Full of Body and Flavour, with a Creamy Head like Bottled Ale, the most perfect substitute for Alcoholic Drinks ever discovered, for either Summer or Winter.

BEWARE of mean and fraudulent imitations.**BEWARE** of others copying our title.**MASON'S** is the original and only genuine.**MASON'S** is a Special Compound entirely from Herbs.

NO OTHER EXTRACT MAKES BEER LIKE IT.

Sold in Bottles at 6d., 1/, & 2/ each, with directions.

MASON'S WINE ESSENCES

Make Temperance Wines in a few minutes.

Ginger, Orange, Lemon, Raspberry, Black Currant, &c.

These are having a very large sale now, and are extensively advertised.

Sold in Bottles at 8d., 1s., and 2s. each.

Quotations on application.

SOLE INVENTORS & MANUFACTURERS: **NEWBALL & MASON,**
Manufacturing Chemists and Botanic Druggists, NOTTINGHAM**DRIED
BITTER ORANGE PEEL**

This Peel is specially cut as free from pith as possible, and by care in drying its Colour and Aroma are well preserved. It is thus in a condition most favorable for the manufacture of the Official preparations.

Sample will be sent free on application.

"EXCELSIOR" TABLE JELLIES

IN CARDBOARD BOXES,

Of 1/2-Pint, Pint, and Quart Size, packed in Wood Boxes free.

1-Pints, 1/8 per doz.: Pints, 3/ per doz.: Quarts, 5/9 per doz.



FLAVOURS:

Orange, Lemon, Calves' Feet, Vanilla, Raspberry, Noyeau, Cherry, Strawberry, Pineapple, and Black Currant.

CHAS. SOUTHWELL & CO.

DOCKHEAD, LONDON, S.E.

TO AERATED WATER MANUFACTURERS

W. W. & S.

SOLUBLE ESSENCES

REGISTERED

ARE GUARANTEED TO BE THE FINEST IN THE MARKET

ESSENCES OF GINGER, LEMON, ORANGE, &c., &c.

HOP ALE & GINGER ALE ESSENCES.

Besides Gold & Silver Medals the above Essences have obtained the Highest Testimonials from all the Medical Journals, and from the Principal Trade Journals in this and other Countries.

PRICE LIST FREE ON APPLICATION.

MANUFACTURING CHEMIST, BEVERLEY ROAD.

PEPTONATE OF IRON

SOLE MAKERS

DENAAYER'S PEPTONES C^o. LONDON

DENAAYER'S

LIQUID PEPTONES STERILIZED

Free from microbes! Keep good for ever in all Climates.

115 BISHOPSGATE STREET WITHIN, LONDON, E.C.

DENAAYER'S PEPTONATE OF IRON. A bland, non-irritating and most easily assimilable ferruginous preparation. For debilitated constitution, children, and aged people.

DENAAYER'S PEPTONE OF MEAT. A powerful restorative for all ailments of the stomach, stimulates general nutrition. Is retained when the stomach rejects all other food. Pleasant to taste.

Of all Chemists and Wholesale Houses.

FOR **FILTERS** Perfect in Mechanical and Chemical Action, Reliable Durable, Easily Cleaned.

LIPSCOMBE, OXFORD STREET, LONDON, W.

Makers to the Royal Family,

Original & sole inventor of the celebrated improved Filter

The ONLY GENUINE are made SOLELY by the Sons of the late Mr. Lipscombe. As there are watches and watches, so there are Filters and Filters, and the Trade are Cautioned against feeble Imitations of Lipscombe's Filters. To avoid grave disappointment, address—

LIPSCOMBE, OXFORD STREET, W.

This Caution is necessary as we have no connection with any other Firm TRADING under the same name Caveat Empor.

T. & F. J. TAYLOR'S

AERATED WATERS,

Newport Pagnel.

ESTABLISHED 1895.

SODA, POTASH, SELTZER, AERATED (without Alkali), and LITHIA WATERS, LEMONADE AND GINGER ALE.

Each Bottle is protected by a Label bearing the Signature of the Firm.

Purity and Excellence of the Water certified by Analysis by Professor ATTFIELD, Ph.D., F.O.S.



TOWER TEA

OBTAINED THE

HIGHEST AWARD

FOR TEA AT THE

PARIS EXHIBITION.



PRIZE MEDAL, PARIS, 1889.

To avoid imposition see that the trade marks (a Tower, with the word "Strength" across it, and "Tower Tea") are on every package, without which none is genuine.

WHERE VACANCIES EXIST AGENTS ARE APPOINTED BY



PRIZE MEDAL, PARIS, 1889.

THE GREAT TOWER STREET TEA CO., LIMITED
5 JEWRY STREET, LONDON, E.C.

SANTHA.

A Digestive EXTRACT OF TEA, made instantly in Cup or Teapot.

The injurious action of tea upon the digestion is due to the tannin it contains; and as this dissolves instantly in hot water, no method of infusion can keep it out. Santha is the only form of tea that has no action upon either food or membranes; and it is not bilious like cocoa and coffee. The *Lancet* of May 4th, 1889, says:—"The aroma and the caffeine are preserved, and the tannin is neutralised and rendered innocuous." The *London Medical Recorder* of Feb. 20th, 1889, says:—"Santha possesses the aromatic and stimulating qualities of the crude leaf, minus its astringency. The *Illustrated Medical News* of August 31, 1889, says:—"We can recommend it as the most digestible and palatable form of tea yet submitted to us." Santha is the only Tea suitable for Weak Digestions. Of Chemists, &c., 1s., 2s. 6d., and 6s.; or by post from works, 2d. extra.

SANTHA TEA COMPANY (LIMITED), Penarth Street, Hatcham, S.E.

Wholesale Agents—BARCLAY & SONS, Farringdon Street, E.C.

MILLAR'S BRITISH WINES.

ORANGE (suitable for Quinine), GINGER, RAISIN, COWSLIP, CHERRY, &c.
A. MILLAR & CO., Thomas Street, DUBLIN.

Sole Agents for London and District—H. J. ROYDANT & CO., 75 Acre Lane, Brixton, S.W.

CIGARS, ETC.

At the Lowest Wholesale Prices.

La Juana 10/6 per 100, Sold at 2d. each.
La Trafalgar 15/0 3d. "
El Sol Habanero, } 22 per 100, Sold at 4d. each.
Havannah 1885 Cig. }
&c. &c. TOBACCO, CIGARETTES, &c.

Samples on receipt of 1s. 6d. in Stamps.

BEWLAY & CO., LTD.

Tobacco Manufacturers and Cigar Importers,
49 STRAND, and at 143 CHEAPSIDE, LONDON.
ESTABLISHED OVER 100 YEARS.

HUGO BROWN & CO.

41 Ormond Street, LIVERPOOL,

SOLE AGENTS IN EUROPE FOR LIEBIG'S

EXTRACT OF BEEF

MADE BY

MESSRS. A. SANTA MARIA & CO.
PAYSANDU.

Sold as imported in cases of two tins each, weighing together about 112 lbs.

TO THE
CHEMISTS & DRUGGISTS
OF
GREAT BRITAIN.

TELEGRAPHIC ADDRESS: *St. George's, Middle St.*
COLEMAN, *NORWICH,*
GEORGE'S, NORWICH. *December, 1887.*

The Excise Authorities having created a difficulty as to the sale of Medicated Wine containing a certain percentage of alcohol, we obtained in January last, from the Inland Revenue Authorities, permission to sell our Liebig's Extract of Meat and Malt Wine, **WITH QUININE**, without a Wine Licence, and many Chemists not holding a Wine Licence have sold considerable quantities. In order further to meet the requirements of the trade, we have introduced a Liebig's Extract of Meat and Malt Wine, **NON-Alcoholic**, made from the juice of the Grape, Liebig's Extract of Meat, and Extract of Malt. This also can be **SOLD WITHOUT A WINE LICENCE**. Your orders will oblige either direct or through the Wholesale Houses.

Yours obediently,

COLEMAN & CO., LIMITED.

*N.B.—The Wine is sold in Bottles, 2/9 and 4/6 each.
Trade prices on application.*

P.S.—Where the Magistrate's Certificate is not held we are willing to pay the entire cost of a Retail Certificate (the holder of which can sell any kind of Wines) if an assorted order of 6 dozen is sent us of any of our preparations. List on application. Our Liebig's Extract of Meat and Malt Wine **WITHOUT QUININE** commands a very large sale, and is recommended by over one thousand medical men who have sent us testimonials in its favour.

SOLE MANUFACTURERS—

COLEMAN & CO., LIMITED,

ST. GEORGE'S NORWICH,

AND 3 NEW LONDON STREET, LONDON, E.C.

EIGHT PRIZE MEDALS AWARDED

GOODALL'S
HOUSEHOLD
SPECIALITIES.

YORKSHIRE RELISH.

Most Delicious Sauce in the World. Bottles, 6d., 1s., and 2s. each.

GOODALL'S BAKING POWDER.

The Best in the World. 1d. Packets; 6d., 1s., 2s. and 5s. Tins.

GOODALL'S EGG POWDER.

One 6d. Tin is equal to 25 eggs. In 1d. Packets; 6d., 1s., 2s. and 5s. Tins.

GOODALL'S CUSTARD POWDER.

Delicious Custards without Eggs. In Boxes, 2d., 6d., and 1s. each.

GOODALL'S BLANCMANGE POWDER

Delicious Blancmange in a Few Minutes. Boxes, 6d. and 1s. each.

GOODALL'S QUININE WINE, B.P.

Best Tonic yet Introduced. Bottles, 6d., 1s. and 2s. each.

GOODALL'S GINGER-BEER POWDER

Makes the Best Ginger-Beer. Packets, 3d. and 6d.

GOODALL'S BRUNSWICK BLACK,

For Painting Stoves, Grates, Iron, Tin, &c. 6d. and 1s. Bottles.

GOODALL'S LAVENDER WATER.

A Rich and Lasting Perfume. Bottles, 1s., 2s., and 5s. each.

GOODALL'S PLATE POWDER,

For Polishing and Cleaning all Metals. Boxes, 6d., 1s. and 2s.

GOODALL'S JELLY SQUARES,

Make a Delicious and Nutritious Jelly. In ½-pint, 1-pint, and Quart boxes, 3d., 6d., and 1s. each.

PROPRIETORS—GOODALL, BACKHOUSE & CO., LEEDS.

PATENT MEDICINES

AND

DRUGGISTS' SUNDRIES.

Monthly Price List of Patent Medicines, Druggists' Sundries, &c., will be sent post free on application to

GOODALL, BACKHOUSE & CO., LEEDS.

THE PURE MALT EXTRACT CO.

THE PURE MALT CO.'S EXTRACT OF MALT.

An Effective and Agreeable Remedy for Affections of the Throat and Lungs incidental to Influenza.



32-oz. Bottle, 2/10.
22/- per doz.



4-oz. Bottle, 6d.
4/- per doz.

When one dozen of each size is ordered, we pay carriage.

EXTRACT OF MALT

Is undoubtedly useful in Consumption and other Wasting Diseases.

EXTRACT OF MALT

Makes palatable that valuable restorative Cod Liver Oil.

EXTRACT OF MALT

May be taken with the meals in Coffee, Cocoa, or any other beverage.

EXTRACT OF MALT

Mixed with Porridge, Gruel, Sago, Arrowroot, it renders them easy of digestion.

EXTRACT OF MALT

Dissolved in Milk it is of great service, being pleasant to the taste and easily retained.

EXTRACT OF MALT

Is pronounced to be one of the best digestive agents.

EXTRACT OF MALT

Prepared from the best Malted Barley by an approved method.

As Samples we will send one Bottle of each size, carriage paid, on receipt of Remittance for 4/3.



16-oz. Bottle, 1/6.
12/- per doz.



8-oz. Bottle, 10d.
7/- per doz.

Special Terms to Merchants, Shippers, and the Wholesale Houses.

To Chemists and others who wish to fill their own style of Bottle, we supply our Malt Extract in 14-lb. Jars, 48/- per cwt.

THE PURE MALT EXTRACT CO.

NEATE STREET, CAMBERWELL, LONDON, S.E.

City Office—MANSION HOUSE CHAMBERS, BUCKLERSBURY



PEDESTAL.

TYRER'S

1d. sizes



BOTTLE.

MENTHOL

6s. gross



v



FIG. A.

INFLUENZA

CURED BY

MENTHOL.

Dr. LENNOX BROWNE says:—"It kills the microbe of infection."—*Vide* MEDICAL PRESS AND CIRCULAR, January 8, 1890.

2d. Size, as Fig. A and B, 12s. gross, stained and varnished, all put on $\frac{1}{4}$ -gross cards with ELASTIC. Sample free.

PETER TYRER, 70 LONG LANE, BOROUGH, LONDON, S.E.



FIG. B.

SOLD EVERYWHERE.

Makes the best
**GRAVIES, SOUPS, &
SAUCES.**

IMPROVES
STEWES and
HASHES.

ASK YOUR GROCER FOR
GRAVINA
EDWARDS' GRAVY POWDER.

TRADE MARK.

REGISTERED

PUT UP
IN

Self-opening Canisters

1-lb., 1/10; $\frac{1}{2}$ -lb., 1/-; $\frac{1}{4}$ -lb., 6d.

Sample Free on receipt of Business Card.

NOURISHING.

ECONOMICAL.

SOLE MANUFACTURERS—

F. KING & CO., LTD.

3 to 6 Camomile Street, LONDON;
26 WARING STREET, BELFAST.

WILKINSON'S COMPRESSED

They are introduced to the public to enable them to make their own HOP BITTERS, YEAST, HOME BREWING, and numerous other purposes. Full particulars given in each packet.

Samples and Prices sent on application to

A. WILKINSON & SONS, 37 CANNING PLACE, LIVERPOOL.

P.S.—Chemists will naturally see the great advantage in making their own Bitters from the Pure Hop itself.

Dealers in every description of Isinglass.

Best Hops compressed into small parcels of one pound and half-pound, and sent out in cases containing 30 lbs. each. These hops are specially selected and compressed for keeping purposes, and will retain their aromatic strength for a considerable time.

ENGLISH HOPS.

"RAMORNIE."

LIEBIG'S

Extract of Meat.

As supplied to the Admiralty, War, and India Offices.

1-lb. Jars..... per lb.	8/9	per doz.	81/0	2-oz. Jars..... per lb.	7/8	per doz.	11/6
$\frac{1}{2}$ -lb. Jars.....	7/0	"	42/0	1-oz. Jars.....	8/4	"	6/3
$\frac{1}{4}$ -lb. Jars.....	7/3	"	21/9	$\frac{1}{2}$ -oz. Jars.....	8/8	"	3/3

QUOTATIONS FOR EXTRACT IN "BULK" ON APPLICATION.

Write for Detailed Price List to the Australian Meat Co., 9 and 11 Fenchurch Avenue, E.C.

6 lbs. Carriage Free.



A GOOD LINE IN DYES
WILL ALWAYS
COMMAND A SALE.

DO NOT DELAY! WRITE AT ONCE!!
And secure a most attractive and saleable Spécialité for
DISPLAY and WINDOW DRESSING.

SAUNDERS' BRILLIANT DYES FOR EASTER EGGS.

LIST OF PRICES.

1d. packets, 7/ per gross.
Display Card containing 18 doz.
assorted, for 10/6.

COLOURS OF DYES.

BLACK	CHARTREUSE
BROWN—	CLARET
LIGHT	CORAL
DARK	CREAM
GOLDEN	CERISE
BLUE—	CRIMSON
LIGHT	CRUSHED
DARK	STRAWBERRY
NAVY	FAWN
ELECTRIC	GOLDEN
BRONZE	YELLOW
BUTTERCUP	GREEN
CANARY	GREY
CARDINAL	



LIST OF PRICES.

3d. packets, 21/ per gross.
Display Card, containing 6 doz.
assorted, for 10/6.

COLOURS OF DYES.

LAVENDER	PURPLE
LILAC	ROSE
MAGENTA	RUBY
MAUVE	SALMON
MARONE	SCARLET
MOSS	SLATE
ORANGE	STRAW
PEACH	SULTAN RED
PINK	TABAC
PLUM	TERRA COTTA
PONCEAU	TUSCAN
POPPY	VIOLET
PUCE	YELLOW

Specimen of Display Card worked up in brilliant colours—the Dyes attached—the whole in a handsome Gilt Frame.

THERE IS NOTHING LIKE IT IN THE TRADE.

A Sample Card of 1d. or 3d., containing the most saleable colours, sent carriage paid on receipt of Postal Order to the value of 10s. 6d. Money returned if the Goods are not approved of.

ANILINE DYES IN PACKETS.

EVERY COLOUR GUARANTEED—BEING THOROUGHLY TESTED BEFORE BEING SENT OUT

Litho. Card—Blue, Red, and Black, on
White Ground—Varnished.

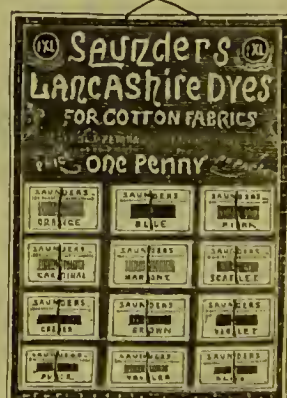


Specimen Card of Dyes for Silk or Wool.



Illustration of our Desk-shape Mahogany Count r
Stock-case, with Coloured Tablet in front and Drawer
at back—price 54/ net, stocked with Dyes, any colour,
equal to 4 gross 1d. and 1 gross 3d. size.

Specimen
Card of Registered



Litho. Card—Red, White, and on Dark
Blue Ground—Varnished.

We are prepared to give Special Quotations (for quantities of 10 gross and upwards) for packed dyes with Customer's own Name and Address on.

PRICE LIST OF ANILINE DYES IN BULK.

ALL COLOURS WARRANTED TO BE EQUAL IN EVERY RESPECT TO WHAT WE PACK.															
Please Compare the Prices.			1-lb. Sample Tins sent per post.			Packed in 1-lb., 1/2-lb., and 1-lb.			Decorated Metal Stock Boxes.						
Black	per lb.	9/	*Cardinal	.....	per lb.	6/	Grey	.....	per lb.	10	Puce	.....	per lb.	9
Brown	"	5/6	Claret	.....	"	6/6	Lavender	.....	"	13/	Purple	.....	"	9/6
" (Bismarck)	"	7/	" Opt.	.....	"	8/	Magenta	.....	"	8/	Rose	.....	"	7/
" (Light)	"	4/6	Cream	.....	"	"	Mauve	.....	"	9/	Ruby	.....	"	7/6
" (Dark)	"	6/	Crushed Straw-	.....	"	"	Marone	.....	"	3/3	Salmon	.....	"	8/
" (Golden)	"	7/	berry	.....	"	8/	" Opt.	.....	"	6/	Scarlet, No. 1	.....	"	4/6
Blue	"	12/	*Cerise	.....	"	6/	Orange	.....	"	6/6	" No. 2	.....	"	9/
" (Light)	"	10/	Crimson	.....	"	7/	Peach	.....	"	10/	Slato	.....	"	10/
" (Dark)	"	9/	Golden Yellow	.....	"	10/	Pink	.....	"	7/6	Sultan Red	.....	"	7/6
" (Navy)	"	9/	Green	.....	"	6/	Plum	.....	"	6/	Terra Cotta	.....	"	9/
" (Electric)	"	15/	" in Crystals	.....	"	18/	" Opt.	.....	"	8/	Violet	.....	"	9/
Canary	"	7/	" Olive	.....	"	7/6	*Ponceau	.....	"	6/	Yellow	.....	"	7/6
If the above are supplied in round Tins, an allowance of 8d. per pound is made.															

If the above are supplied in round Tins, an allowance of 6d. per pound is made.

All the colours marked * are special preparations of our own, and will be found very superior, both for brilliancy of colour and economy in use.

SOLD BY CHEMISTS AND DRUGGISTS ONLY; WHOLESALE FROM
AYRTON & SAUNDERS, Dye Merchants, 149 Duke St., LIVERPOOL.

Agents—W. EDWARDS & SON, 157 Queen Victoria Street, E.C.



Telephone Number, 1852.

Telegraphic Address—CHEMIOUS LONDON.

ADVERTISERS' AND BUYERS' REFERENCE LIST AND INDEX TO ADVERTISEMENTS

ADVERTISEMENTS APPEARING IN THIS ISSUE OF "THE CHEMIST AND DRUGGIST."

NOTE.—The Folios shown in this Index are those at the FOOT of the Page, and not at the Top. This arrangement is necessary in order to meet the requirements of the Post Office.

Foot of Page	Foot of Page	Foot of Page	Foot of Page
Alofas Co. 56	Egrot 10	Liverpool Lint Co. 46	Rieb, E. C., Co. 36
Anglo-American Oil Co. (Lim.) 55	Elliman, Sons & Co. Text 362	Liverpool School of Pharmacy, Tho. 4	Rieqlès & Cie. 36
Apollinaris, The, Co. Cover	Evans, Sons & Co. 43, Cover	Lofthouse & Saltmer. 40	Robbins, J., & Co. 38
Austri & Co. 48	Evans & Sons (Lim.) 43, Cover	London Hospital and Medical School 4	Robinson, B. 12
Australian Drug Co. 32	Evans, Lescher & Wobh, London 43	Lorenz, H. 56	Rocke, Tompsitt & Co. 34
Anstralian Meat Co. 19	..... Cover	Luneberger Wax Bleaching Works 56	
Ayrton & Saunders 20	Felton, Grimwade & Co. 34	Lynch & Co. Cover	
Baelz, R., & Co. 40	Ferris & Co. 31	Macfarlan, J. F., & Co. 40	Sanders, H. G., & Sons 26
Barclay & Sons (Lim.) 6	Fink, F., & Co. 56	Macnair, J. & D., & Co. 54	Sanford & Son 56
Barnett & Foster 10	Fitch & Nottingham 46	Manchester College of Chemistry and Pharmacy 4	Sanger & Sons 6
Barron, Harveys & Co. 42	French Hygienic Society 41	Mann, C. A., & Co. 25	Sanitas, The, Co. Text 362
Battle, J. R. 52	Fuerst Bros. 26	Marion & Co. 30	Santha Ten Co. 16
Beach, J., & Sons 56	Gent & Co. Text 352	Mather, W. 45	School of Pharmacy, The 4
Beecham, T. 41	Globe Chemical Co. 56	Maw, S., Son & Thompson 5	Seabury & Johnson 46
Berry, F. H. 5	Goodall, Backhouse & Co. 17	May & Baker Cover	Sequah (Lim.) 44
Bewlay & Co. 16	Goodall, E. F. 50	May, Roberts & Co. 42	Silicated Carbon Filter Co. Text 362
Beyer Frères 50	Greiff, R. W., & Co. 38	McKesson & Robbins 27	Simon, J. 46
Billault 43	Great Tower Street Tea Co. 16	Melin, C. 14, 50	Smith, Stephen, & Co. 54
Blondeau & Cie. 58	Hamilton & Co. 53	Millar, A., & Co. 16	Smith, T. & H., & Co. 44
Bowley, S., & Son 54	Hargreaves, Dr., M.D. 4	Morson, T., & Son 37	Soul, W. H., & Co. 32
Bowling & Govier 51	Harker, C. R., Staggs & Morgan 4	Moseley, D., & Sons 24	Southwell, Chas., & Co. 14
Braggi, P., & Co. 53	Hay, W. 15	Moss, J., & Co. Text 362	Spirone, Tbe, Co. 47
Bratty & Hinchliffe (Lim.) 13	Haywood, J. H. 47	Mouilla Liquid Soap Co. (Lim.) 56	Spratts Patent (Lim.) 52
Brett, F. J. Coloured Supplement 16	Hearn, E. A., & Co. 48	Mumford, G. S. Text 362	Steedman, J. 24
Brown, Hugo & Co. 16	Hewlett, O. J., & Son 37	Muter, Dr. 48	Stern, G. & G. 9
Burroughs, James 54	Hoekin, Wilson & Co. 57	Natal Drug Co. (Lim.) 36	Sumner, R., & Co. Cover
Burroughs, Wellcome & Co. 29, 30	Holloway, P. 48	Natah, E. 51	Swift Specific Co., The 30
Bush, W. J., & Co. 11	Hooper, W., & Co. Cover	Newball & Masou 14	
Bygrave, J. & W. 51	Horn & Son 56	Newbery, F., & Sons 23	
Cadbury Bros. Cover	Invigorine Manufacturing Co. 10	Oldfield, Pattison & Co. 3	Taddy & Co. 12
Chauteand, G. 36	Isaacs, I., & Co. 48	Orme & Co. 5	Taylor, T. & F. J. 15
Chnrchill, J. & A. 4	Jewsbury & Brown 26	Pascall, J. 12	Taylor, J. N. 36
Clark, S., & Co. 50	Jeyes' Sanitary Compounds Co. (Lim.) Text 362	Peake, Allen & Co. 36	Tbompson, Walters, Hole & Co. (Lim.) 7
Clay, Dod & Co. 42	Johnsen & Jorgensen 43	Penny Quinine 44	Towle, A. F., & Son 27
Clements, S. G., & Co. 38	Johns, W. 42	Peterson, M., & Co. 46	Treble, G., & Son 51
Cocking & Co. 34	Keith, B., & Co. 36	Phillips, G., & Co. 54	Trommsdorff, H. 35
Coleman & Co. 17	Kemphorne, Prosser & Co. 35	Prosser, Taylor & Co. 33	Tyroke & King 38
Colthurst & Harding 53	Kennedy, The, Co. 46	Pure Malt Extract Co. 18	Tyrer, P. 19
Critchley, T. 56	Kilner Bros. 49	Quilliam, J., & Co. 56	
Curtis & Co. 40	King, F., & Co. 19	Radams' Microbe Killer Co. (Lim.) 43	Vaccine Association 24
Da Silva & Co. 56	Lakeman, J. J. 56	Rankin & Borland 46	Van Houten's Cocoa 31
Davy, Hnmphrey, & Co. (Lim.) 12	Lennon, B. G., & Co. 34		Vogeler, Charles A., The, Co. 28
Day & Sons 52	Lewis, Julius 36		
Day, Son & Hewitt 53	Lewis, H. K. 4		Warrick Bros. 26
Dee Oil Co. 24	Lipscombe & Co. 15		Wilkinson, A., & Sons 19
Denaeyer's Peptone Co. 15			Wood, Vincent 46
Deutschmann & Woroneicki .. 35			Wright, Layman & Umney Text 362
Dinneford & Co. 38			Wright, W. V., & Co. 30
Dukes, B. 5			Wyleys & Co. 39
Dunn, W. G., & Co. 56			
Durrant, G. 56			Zuccato & Wolff 4

CLASSIFIED LIST OF ALL ADVERTISERS

Those whose Names do not appear above are published in one of the other issues of this month.

AERATED & MINERALS

Apollinaris (Hungarian)
Aperient Water, Diamond
Mark, Friedrichshall
Apollinaris
Barnett and Foster
Chemists' Aerated Waters
Association.
Ellis (Kenthin)
Hassall and Co. (Citric Acid
Phospho)
Hay, W.
Idris and Co.
Jewsbury and Brown
Kimmond and Co.
Levico Springs Co. (Limited)
Mills and Co. (Bouras)
Taylor, T. and F. J.
[See GINGER ALE.]

DITTO PLANT

[See SYRPHONS and ESSENCE.]
Barnett and Foster
Bratty & Hinchliffe (Ld.)
Egrot
Favarger and Co.
Fevre, T.
Guerst Frères
Prudon and Dubost
Tyler, Hayward, and Co.

ACETIC ACID

Dunn and Co.
Fuerst Bros.
Morris and Gallard (Salts)

ALKALOIDS

Howards and Sons (Cinchona).
Smith, T. and H. & Co.

AGENCIES ABROAD

Aard, Ed.
Australian Drug Co.
Boisey
Cooking and Co. (Japan)
Felton, Grimwade and Co.
(Melbourne)
Fougera and Co. (New York)
Kemphorne, Prosser & Co. N.Z.
Lennon, B. G., and Co.
Levy, Jules
Natal Drug Co. (Limited)
Peake, Allan and Co.
Prosser, Taylor and Co.
Rich, E. C., Co.
Roberts (Paris, &c.)
Roche, Tompsitt and Co. (Mel-
bourne)
Sharland and Co.
Soul, W. H., and Co.

AMMONIA

May and Baker.
White, A., and Sons
Woolley, Sons and Co.

APPARATUS

Clarke, B. (Food Warmer and
Bed Tray)
Egrot
French Nickel Manufacturing
Co.
Orme (Scientific)
Perken, Son and Rayment
Tebbutt, F.
Wedgwood & Sons (Mortars)

BANDAGES

Bailey, W. H., and Son
Robinson and Sons
Seabury and Johnsons

BAKING POWDER

Dunn, W. G., and Co.
Goodall, Backhouse & Co.
BEE SWAX
Bowdler, W. H., and Co.
Luneberger Wax Bleaching
Works

BICARB. SODA

Brunner, Mond and Co., Lim.
Howards and Sons
May and Baker

BISMUTH. PREP.

Hearson, Squire and Francis
Hewlett and Sons
Howards and Sons
May and Baker
Symes and Co.
White, Alfred, and Sons

BLOOD MIXTURE

Lincoln and Midland Counties
Drug Co.

BOOKS

Churchill, J. and A.
Hargreaves, Dr.
Lewis, H. K.
Muter, Dr.
Squires and Sons

BOTANIC BEER

Newball and Mason

BRUSHES

Dukas and Co.
Fordham, W. B., and Sons
(Lim.)
Kent, G. B., and Sons
Moseley, David and Sons

BOTTLE CAPPING

Boech, J., and Sons

BOTTLES

Aire and Oalder Bottle Co. (Ld.)
Barnett and Foster
Barratt, E. H.
Bratty & Hinchliffe (Ld.)
Brett's (Lim.)
Evans, Sons and Co.
Gilbertson, H., and Sons
Hearn, E. A., and Co.
Isaacs and Co.
Kilner Bros.
Melin, G. (Stoppers)
Pothe, H., and Co.
Sandars, H. G., and Son
Shirley, A. W.
Toogood, W.
Youldon, E.
"W" Brand

BOXES

Anstin and Co. (Cardboard)
Chalmers, W. B.
Owen, J., Jr.
Parmenter, I. W. & Co. Lim.
Robinson and Sons

BUTTER COLR. &c.

Clomonts, S. G., and Co.
Johnsen and Jorgensen
Oldfield, Pattison and Co.

CAMPHOR

Fuerst Bros.
Howards and Sons
Koenig and Ashwell (Honoce-
patbio)

CAPSULES

(METALLIC)

Betts and Co.
Brooks, Peel and Co.
Melin, O. (Macanine)
Sandars, H. G., and Son

CAPSULES

Donson, J. (Medicinal)
Duncan, Flookhart and Co.
Evans, Sons and Co.
Hooper, B., and Co.
Maw, S., Son and Thompson

CSCRA SAGRADA

Duncan, Flookhart and Co.
Evans, Sons and Co.
Farris and Co.
Moss, J., and Co.
Squire and Sons

CASTOR OIL

Fuerst Bros.

CATALOGUE

Evans, Sons and Co.
Maw, Son and Thompson, S.
May, Roberts and Co.
Sanger and Son
Schutze, F., and Co.
Thompson, Walters, Hole & Co.

CEMENT

Kay Bros. (Lim.)

CHALK PRECIP.

Dunn and Co.
Levermore, Aug., and Co.
White, A., and Sons

CHEST PROTECTRS

Bailey, W. H., and Son
Evans, Sons and Co.
Liverpool Lint Co.
Sanger and Son
Schutze, F., and Co.
Thompson, Walters, Hole and
Co. (Limited)
Wood, Vincent

CHEMICALS

Andreas, Oscar and Co.
Boehringer, C. F., and Sohne
Bramwell and Son
Brunner, Mond and Co., Lim.
Bush, W., Son and Co.
Dunn and Co.
Fletcher Fletcher and Stevenson
Fuerst Brothers
Goodall, Backhouse and Co.
Greiff, R. W., and Co.
Hill, A. S., and Son
Hodgkinson, Treacher and Clarke
Howards and Son (Pharm.)
Kuhn, B.
Levermore, Aug., and Co.
Lofthouse and Saltmer
Loreux, H.
May and Baker
Morris and Gallard
Moss and Co.
Pronk, Davis and Co.
Stern, G. and G. (Pharm.)
Smith, T. and H., and Co.
Type and Kink
White, A., and Sons
Zimmermann, A. and M.

CHLORIDE OF GOLD

Rowland, L.

CHL. OF POTASH

Burroughs, Wellcome and Co.
Hooper, B., and Co.

CHLORIDE OF LIME

Government Sanitary Co.
National Chemical Co.

CHLORODYNE

Davenport (Browne's)
Towie, A. F., and Son

CHLOROFORM, &c.

Duncan, Flockhart and Co.
Macfarlan, J. F., and Son
Smith, T. and H., and Co.
Wright, Layman and Umney
Zimmermann, A., and Son

CITRIC ACID

Hassalls (Phosphor)

COCAINE-HYDRO.

Boehringer, C. F., and Sohne
Howards and Sons

COCA WINE

Armbricht, Nelson and Co.
Evans, Sons and Co.
Frenck Hygiene Soc.

COCOA & CHOCOLATE

Cadbury Bros
Fry and Sons
Rowntree and Co.
Van Houten's Cocoa

COD-LIVER OIL

Allen and Hanbury
Burroughs, Wellcome and Co.
Evans, Sons and Co.
Hill, A. S., and Son
Moller, P.
Lofthouse and Saltmer
Oppenheimer Bros. and Co.
Smith, T. J.
Woolley, Sons and Co.
Wright, Layman and Umney

COFFEE

Symington and Co. (Coffee
Essences)

COLPSIBLE TUBES

Betts and Co.
Brooks, Peel and Co.
Sanders, H. G., & Son

COMP. MEDICINES

Allen and Hanbury
Blyton, Astley and Co.
Burroughs, Wellcome and Co.
Fuerst Bros.
Hooper, B., and Co.
Leo and Co.
Wyleys and Co.

CONFECTIONERY

Blyton, Astley and Co.
Gibson, R., and Sons
Kerfoot, T.
Fascall, J.
Warrick Brothers

CONCENT. LIQS.

Evans, Sons and Co.
Fletcher, Fletcher & Stevenson
Seabury & Johnson (Plasters)
Thompson, M. F.
Young, H.

COTTON WOOL

Haynes, G., & Co. (Absorbent)
Robinson and Sons (Aberb.)
Sanger, J., and Sons
Seabury and Johnson

CRSHD LINSEED

Mumford, G. S.

CENTRIFUGES

Fentiman & Co.
Jewsbury and Brown
Kennedy, The, Co.
Lackman, J. J.
Newbery and Sons
Reed, H.
Snith, O., and Co.
Thompson and Capper
Warrick Bros.
Woods, W. (Aeros Nnt)
Wright, O., and Co.

DISINTEGRATORS

Carter, J. H.

DOG MEDICINES

Spratts (Patent)

DISINFECTANTS

Government Sanitary Co.
Hamilton and Co.
Jeyes' Sanitary Compounds
National Chemical Co.
Seabury and Johnson
Sanitas Co.

DRUGGISTS' SUN,

Ayrton and Saunders
Bailly, M., and Co.
Barclay and Sons (Limited)
Davy, Humphrey, & Co.
Evans, Leseber and Webb
Evans, Sons, and Co. (Savary)
Gilbertson, H., and Sons
Hill, A. S., and Son
Hookin, Wilson and Co
Idris and Co.
Kay Bros., Lim.
Lynch and Co.
Marriot, E., and Co.
Maw, Son and Thompson, S.
May, Roberts and Co.
Rankin and Sons (Cork Mats)
Sanger and Sons
Sehntze and Co.
Thompson, Walters, Hole & Co.
Toogood, W.
Wood, Vincent

DYES

Ayrton and Saunders

EAU DE COLOGNE

Farina, J. M.

ELASTIC HOSIERY

Wood, V.

ELECTRIC APPAR.

Berry, F. H.
Dartois, F., and Co.
Gent and Co.
Orme and Co.

EMBROCATION

Elliman, Sons and Co.

ENAMEL

Fordham, W. B., and Sons

ENEMAS

Ratley, W. H., and Son
Evans, Sons and Co.
Ingram and Son
Lynch and Co.
Sanger and Son
Sehntze, F., and Co.

ENGRAVERS

Barker, W., and Son
Corran, J. R. (Glass)

ESSENCES

Beckett, W.
Brathay and Hinehlife (Ld.)
Burgoyne, Burbridge and Co.
Bush, W. J., and Co.
Cummock, J.
Duckworth and Co.
Fitzsimmons and Fearnley
Goodall, Backhouse and Co.
Hay, W.
Idris and Co.
May and Baker
Oldfield, Pattinson and Co.
Stevenson and Howell
Tyrer, P. (Anchovies)
Woolley, Sons and Co.

ESSENTIAL OILS

Bush, W., Son and Co.
Cocking (Japan Peppermint)
Cummock, J.
Duckworth and Co.
Evans, Sons and Co.
Fitzsimmons and Fearnley
Fratelli de Pasquale and Co.
Hodgkinson, Treacher and Clarke
May and Baker
Stevenson and Howell
Symes and Co.
Tombarel Freres
Treatt, R. C.
Warrick Brothers
Wright, Layman and Umney
Vogt, G., and Co.

ETHER

Claudian, G.
Duncan, Flockhart and Co.
Howards and Son
May and Baker
Robbins
White, A., and Sons
Woolley, Sons and Co.
Wright, Layman and Umney

EUCALYPTUS

Downs R. I. P. Co.
Tucker, J., and Co.

EXTRACTS, FLUID

Allen and Hanbury
Barber, G., and Co.
Burgoyne, Burbridge and Co.
Evans, Sons and Co.
Fletcher, Fletcher & Stevenson
Hearon, Squire and Francis
Hooper, B., & Co.
Moss and Co.
Potter and Clarke
Wright, Layman and Umney

EXTRACT, MEAT

Australian Meat Co.
Boyd (Limited)
Brand and Co.
Brown, Hugo, and Co.
Densayer's Peptone Co.
Liebig Co.
"Maggi"

FEEDING BOTTLES

Brethts, B. and Co., Lim.
Evans, Sons and Co.
Hearon, B. A., and Co.
Hookin, Wilson and Co.
Kilner Bros.
Lynch and Co.
Marriot, E., and Co.
May, Roberts and Co.
Thompson, Walters, Hole and Co. (Limited)
Toogood, W.

FILTERING

Doulton and Co.
Lipscombe and Co.
Sifted Carbon Filter Co.

FLY PAPERS

Ford, Shapland and Co.

FOOD (Infants' & Invalids')

Allen and Hanbury
Baelz, R., and Co.
Brand and Co.
Bray, J. L. (Charcoal Blacuit)
Goodall, Backhouse and Co.
Hearon, Squire and Francis
King, F., and Co., Lim.
Liebig Co.
"Maggi"
Mottershead & Co. (Benger's Food)
Nestle, H.

GINGER ALE

Hay, W. (Essence)
Klimond and Co.
Mills, E. M., and Co.

GLYCERINE

Pink and Co.
Fuerst Bros.
Price's Candle Co.
Van Geelkerken and Co.

GRANULAR PREP.

Curtis and Co.
Hearon, Squire and Francis
Hill, A. S., and Son
Kerfoot, T.
Wright, Layman and Umney

GUM

Pink (Arable, &c.)
Deutschmann & Woronecki
Hyde, Nash and Co.
Knight and Co.
Levermore Aug., and Co.
Macnair, J. and D., and Co.
Pronk, Davis and Co.

GUTTAPERCHA

Duncan, Flockhart and Co.

HAIR PREP.

Brodie, J. (Imperial Hair Dye)
Cheesebrough Mfg. Co.
Edwards and Co.
Rose Manufacturing Co.
Truefitt, H. P. (Limited)

HERB BEER EXTS

Newball and Mason
Oldfield, Pattinson and Co.
Potter and Clarke

HERBALISTS

Butler, McCulloch and Co.
Newball and Mason (Extract of Herbs)
Potter and Clarke (Extract of Herbs)
Wilkinson, A., and Sons (Compressed Hops)

HOMOGOPATEIC

Keene and Ashwell
Leath and Ross
Thompson and Capper
Watson and Wates

HOPS

Wilkinson, A., and Sons

HOP ALRESENCE

Hay, W.

HOSPITALS

Bolingbroke House
London Homoeopathic

HYPOPHOSPHITES

Duncan, Flockhart and Co.
Dunn and Co.
Fellows
Fletcher, Fletcher and Co.
Symes and Co.
Type and King

INHALERS

Anderson and Adams
Evans Sons and Co.
Godfrey and Cooke
Hookin, Wilson and Co.
Schultz, F., and Co.
Toogood, W.

INSECTICIDES

Stanford and Co.
Shore, J. F.
Steiner and Co.
Vogt, G., and Co.

INK [See MARKING]

Bewley and Draper
Dunne, Flockhart and Co.

JELLIES (TABLE)

Southwell, O., and Co.

KETCHUP

Tyrer, P.

LARD

Ewen J.

LEECES

Fitch and Nottingham

LIME JUICE

Evans, Sons and Co.
Idris and Co.

LINT

Liverpool Lint Co.
Newsome, C.
Robinson and Sons
Seabury and Johnson

LOZENGES

Allen and Hanbury
Blyton, Astley and Co.
Gibson, R., and Sons (Mafra.)
Hill and Son
Kerfoot, T.
Pascoli, J.
Raimes and Co.
Randall and Son
Warrick Bros.

MACHINERY

Beyer Freres.
Burroughs, Wellcome and Co.
Carter, J. H.
Goodall, E. F.
Holroyd & Co. (Limited)
McFerran, J. A.
Melin, O. (Capsuling)
Werner and Pfleiderer

MAGNESIA

Andreas, Oscar, and Co.
Bush, W., Son and Co.
Dinnerford
Henry, T. and W. (Calcined)
Hill and Sons, A. S.
Kerfoot, T. (Oxide)
Murray, Sir James, and Son

MALT EXTRACT, &c.

Baelz, R., and Co.
Burroughs, Wellcome and Co. (Kieper's)
Hearon, Squire and Francis
Oppenheimer Bros. and Co.
Pure Malt Extract Co.

MARKING INKS

Barber, G., and Co. (Orlmeon)
Hickinson, J.

MEDICINE CHESTS

Bentley, E., and Sons
Day, Son and Hewitt (Veterinary)
Knight and Co.
Day and Sons (Veterinary)

MENTHOL

Al Menthol Depot, A. W.
Shirley, Proprietor
Cooking and Co.
Hookin, Wilson and Co.

MERCURIALS

Fuerst Brothers
Howards and Sons
May and Baker

METHYLATED SPIRITS

Burrough, J.
Harvey, J. & W., and Co.
Jones and Co.
Macnair, J. and D., and Co.
Phillips, G., and Co.

METHYLENE

Bohms, J., and Co.

MICROSCOPES

Darton, F., and Co.
Perken, Son and Rayment

MILK

Nestle, H. (Condensed)

MIXING

Carter, J. H.
Werner and Pfleiderer

MORPHIA

Macfarlan, J. F., and Co.
Smith, T. and H.

OILS, PAINTS, &c.

Anglo-American Oil Co. (Lim.)
Colthurst and Harding
Fox, W., and Sons
Pronk, Davis and Co.

OINTMENT BASES

Burroughs, Wellcome and Co.
Cheesebrough (Vaseline)
Grindley (Petroleum Jelly)

OPHTHALMIC

Pomies, Dr.

OPTICIANS

Darton, F., and Co.
Perken, Son and Rayment
Raphael and Co.

OTTO OF ROSE

Fuerst Bros.
Treatt, H. C.

PEPSINE, &c.

Burroughs, Wellcome and Co.
Fletcher, Fletcher & Stevenson
Newbery (Inglavin)
Werner and Co. (Inglavin)
Zimmermann

PAPAIN FINKLES

Kuhn, B.

PARALDEHYDE

Zimmermann, A., and M.

PATENT AGENTS

Dukes, B.
Horn and Son

PATENT MEDICINES

Alofas Co.
Armbricht, Nelson and Co.
Atkinson and Barber (Infant's)
Frosier)
Barclay and Sons (Limited)
Beecham (Pills)
Braggi and Co.
Crough, F. B. (Wafers)
Da Silva and Co.
Edwards and Son
Evans, Leach and Webb
Fentiman's (Powders)
Globe Chemical Co.
Goodall, Backhouse and Co.
Grossgurtin, C.
Hollway (Pills and Oint.)
Hop Bitters Co. (Lim.)
Inverness Manufacturing Co.
John's Liver Pills
Kemp, W. H.
Lalor (Phosphodyne, &c.)
Lincoln (Clark's Mix.)
May, Roberts and Co.
Newbery and Sons
Riem's Microbe Killer Co. (Lim.)
Roberts and Co. (Forsin)
Sequah (Limited)
Swift's Specie Co.
Vogeler, The O. A. Co.
Wilson, A. (Bunter's Nervine)

PEPPERMINT OIL

Cocking and Co.

PERFUMERY,**FANCY SOAPS**

Blondeau and Co.
Burroughs, Wellcome and Co.
Cheesebrough Manufacturing Co.
Chiswick Soap Co.
Cook, R., & Co.
Coward and Co.
Dee Oil Co. (Limited)
Durrant, Geo.
Ewen (Soaps)
Farina, J. M.
Gland Pills
Greenelli, T. S., and Son
Mann, C. A., and Co.
Mouilla Liquid Soap Co., Lim.
Newbery and Sons (Bardoe's)
Osborne, Bauc & Cheeseman
Pears' Soap
Price's Patent Candle Co.
Rose Manufacturing Co.
Rouse & Co.
Sainsbury, S. (Lav. Water)
Shirley, A. W.
Steedman, J.
Taylor, J. N.
Treatt, R. C.
Truefitt, H. P. (Limited)
Violet
Vogt, G., and Co.
Warrick Brothers
Wedlake, M.
West, T. (Ozell's Mon)
Woolley, Sons & Co. (Powder)

PEROX. OF HYDR

Dunn and Co.
Robbins and Co.

PETROLEUM

Anglo-American Oil Co. (Lim.)
Dee Oil Co. (Limited) (Jelly)
Grindley and Co.
Hamilton and Co. (Jelly)

PHARM. PREPS.

Allen and Hanbury
Baelz, R., and Co.
Barron, Squire and Co.
Billault
Brady and Martin
Burgoyne, Burbridge & Co.
Burroughs, Wellcome & Co.
Chanteaud, G.
Chassaigne and Co.
Claudian, G.
Dee Oil Co. (Limited)
Deutschmann & Woronecki
Duncan, Flockhart and Co.
Fellows
Fenies and Co.
Fletcher (Lgrs. for Syrups).
Fruneau, E.
Giles Schacht & Co.
Greiff, R. W., and Co.
Hearon, Squire and Francis
Hewlett and Son
Hill, A. S., and Son
Hooper, B., and Co.
Howards and Son
Keith & Co. (Cone. Tinctures)
Loreux, H.
May and Baker (Phenacetin)
Morson, T., and Son
Rankin and Horland
Reidies and Co.
Roberts and Co.
Soden Mineral Produce Co. Ltd.
Symes and Co.
Trommsdorff, H.
Tucker, J., and Co.
White, Alfred, and Sons
Willows, Francis and Bnties
Woolley, Sons and Co.
Wyleys and Co.

PHOTOGRAPHIC

American Camera Co.
Botwright and Grey
Howards and Son (Chemicals)
Marion and Co.
Orme, J., and Co.
Perken, Son and Rayment
White, Alfred, and Sons

PINE PRODUCTS

Burroughs, Wellcome and Co.
Stern, G. and G.

PILL MACHINES

Pindar, J. W.
Toogood, W. (Coater)

PILLS (Coated, &c.)

Allen and Hanbury
Anderson Apothecaries Hall
Beecham, Thomas
Eade's Gout Pills
Evans, Sons and Co.
Frere, L.
Holloway's
McKesson and Robbins
Newbery and Sons
Richards, J. M.
Towle, B. T.
Warner, W. R. & Co. (Coated)
Wyleys and Co.

PLASTERS

Gooper and Co.
Evans, Sons and Co.
Johnson and Johnson
Mather, W.
Quilliam, J., and Co.
St. Dalmas, A. De
Seabury and Johnson
Thompson, M. F.
Young, H.

PODOPHYLLIN, &c.

Keith, B., and Co.
Smith, T. and H., and Co.

POLISHING

Bradley & Bourdas (Albatum)
Fordham, W. B., and Sons
(Limited)
Oakley, John, and Sons
Griffiths, T. M.

PORCELAIN GOODS

Toogood, (B.O. Pote, regist.)

PRINTING

Corsan, J. R. (Glass)
Bowers Bros.
Cyclostyle Co.
Ford, Shapland and Co.
Silverlock, H.
Townsend, J.
Zuccato and Woolf.

PUMILINE

Stern, G. and G.

QUININE SALTS

Andreas, Oscar, and Co.
Boehringer, G. F., and Sohne
Howard and Sons
Kahn, B.
Rivers, Hicks (Penny Quinine)
Zimmermann and Co.

RENNET

Clements, S. G., and Co.
Duncan, Flockhart and Co.
Johnson and Jorgensen
Oldfield, Pattinson and Co.

RESPIRATORS

Schntze, P., and Co.

SACCHARIN

Allen and Hanbury
Burroughs, Welloome and Co.

SALICIN

Macfarlan and Co.
Smith, T. and H., and Co.

SALICYLIC ACID

Fuerst Bros. (Kolbe's)
Morson, T., and Son

SALOL

Kuhn, B.

SAUCES, PICKLES

Goodall, Backhouse and Co.
Tyrer, P.

SCHOOLS, &c.

Central School of Chemistry
and Pharmacy
City School of Chemistry and
Pharmacy (Lim.)
Liverpool School of Pharmacy
London Homoeopathic and
Medicinal School
Manchester College
South London School of
Pharmacy, Lim.
The School of Pharmacy
Westminster College

SEALING WAX

Stewart, G., and Co.

SEEDS

Potter and Clarke

SELTZGENES

Brady and Hinchliffe, (Ld.)
Durafor
Evans, Sons and Co.
Fevre, T.
Gerant, E. and Co.
May, Roberts and Co.

SHOP FITTERS

Bowling and Govier
Bygrave, J. and W.
Byans, Sons and Co.
Hawke and Son
Howlett, S.
Natali, E. (Show Cases)
Poths, H., and Co.
Treble, G., and Co.
Treble, G., and Son
Yates, W. S.

SOAP

Ayrton and Saundere
Blondeau and Co. (Vinolla)
Oblewick Soap Co.
Cook, E., and Co.
Fordham, W. B., & Sons (Ld.)
Pears' Soap
Stern, G. and G.

SPONGE

Creswell Bros.
Peterson, M., and Co.

SPECTACLES

Botwright and Grey
Darton, F., and Co.
Perkon, Son and Rayment
Raphael and Co.

SPIRIT

Bowley, S., and Son
Burroughs (Pure and Methyl)
Evans, Sons & Co.
Harvey, J. and W., and Co.
Jones and Co. (Methyl)
Macnair, A., and Co.
Macnair, J. and D., and Co.
Phillips and Co.
Smith, Stephen and Co.

STAMPS (RUBBER)

Hickinson, J.
Pollard, A. W.

STARCH

Grithley (Gloss)

STOPPERS

Austin and Co. (Sprinklers)
Barnett and Foster
Sanders, H. G., and Son

STOVES

Clark, S. and Co.

SUGAR

Gibson, R., and Sons

SURGICAL

Ayrton and Saunders
Bailey, W. H., and Son
Barolay and Sons (Limited)
Geeking, J. T.
De Luca, G. V.
Bechmann Broe, and Walsh
Haywood, J. H.
Ingram and Son
Liverpool Patent Lint Co.
Maw, Son and Thompson
Mestier and Co.
Robinson and Sons
Schntze, P., and Co.
Schoenfeld Freres
Thompson, Walters, Hole and
Co. (Limited)
Wood, Vincent

SULFONAL

Burroughs, Welloome and Co.
May and Baker

SYPHONS

Barnett and Foster
Brady and Hinchliffe (Ld.)
Durafor
Favarger and Co.
Fevre, T.
Gerant, E., and Co.
Kilner Bros.
Prudden and Dubost

SYRINGES

De Luca, G. V.
Schoenfeld Freres

SYRUPS

Fletcher, Fletcher (Liquors)
Idris and Co.

TEA

French and Langdale
Gt. Tower St. Tea Co.
Santha Tea
Walker and Dalrymple

THERMOMETERS

Bailey, W. H., and Son
Borry, F. H.
Darton, F., and Co.
Perkon, Son and Rayment

TILL

Stokes, G. R., and Co.

TOBACCO,**CIGARETTES**

Bowley and Co.
Peacock, M. & R.
Taddy and Co.

TOILET

Evans, Sons and Co.
Fordham, W. B., and Sons
(Lim.)
Hopgood and Co.
Mumford, G. S.
Qneloh, H. G.
Simon, J.
Trueditt, H. P. (Limited)

TOOTH PASTE

Jewsbury and Brown
Sutton, O., and Co. (Block)
Wilson, A. (Bunter's)
Woods, M. (Arecas)

TRADE MARKS

Dukes, B.
rn and Son

TRUSSES

Ayrton and Saunders
Bailey, W. H., and Son
Haywood, J. H.
Wood, V.

TYPE-WRITING

Pollard, A. W.

URETHANE

Howards and Sons

VACCINATION

Vaccine Association (Lymph)

VALUERS AND**TRANSFER AGENTS**

Berdoe & Co.
Brett, P. J.
Crocker, G. B.
Orridge and Co.

VERMIN KILLERS

Battle, J. R.
Sanford and Son
Steiner and Co.

VASELINE

Chesebrough Manufacturing Co.

VETERINARY

Bigg, T.
Braggi, P., and Co.
Day and Sons
Day, Son and Hewitt
Elliman, Sons and Co.
James, W. H. (Biller)
Mere de Chantilly, P.
Mookledge, J.
Spratts (Dogs)
Sutton, P., and Co.
Walker, Troke and Co.
Wyleys and Co.

VINOLIA

(Superfatted Medical
and Toilet)
Blondeau and Co.

WHOLESALE AND**EXPORT DRUGS**

Allen and Hanbury
Barron, Harveys and Co.
Brothers, J. and Co.
Burkoyne, Burdidge and Co.
Bush, W., Son and Co.
Clay, Dod and Co.
Coward, G. P., and Co.
Davy, Humphrey, and Co.
Evans, Sons and Co.
Evans, Lecher and Webb
Evans and Sons (Limited)
Faulding, P. H., and Co.
Ferre and Co.
Fox, W., and Sons
Goodall, Backhouse and Co.
Harker, Stagg and Morgan
Hearon, Squire and Francois
Hewlett and Son
Hill, A. S., and Son
Hodgkinson, Treacher and
Clarke

Lothouse and Saltmer
Macfarlan, J. P., and Co.
Oldfield, Pattison and Co.
Potter & Clarke (Amerieu)
Sumner, R., and Co.
Symes and Co.
Thompson and Capper
Thompson, Walters, Hole and
Co. (Limited)

Walker, Troke and Co.
Will, W., Francis, and Butler
Wyleys, Jas., Sons and Co.
Wright, Layman and Umney
Wyleys and Co.

WINES, SPIRITS

Goleman and Co. (Mustard)
Durrant, G. (Orange) Malt.
Goodall, Backhouse and Co.
Idris & Co.
Miller, A., and Co.
Robinson, B.

BERDOE'S TRIPLE FRENCH PERFUMES



THESE PERFUMES have been known to the trade for many years past, and their steadily increasing sale is the best proof of the appreciation in which they are held. Notwithstanding that the prices of some brands of perfumes have been reduced, F. NEWBURY & SONS find it both impossible and needless to offer any other advantages to buyers than—(1) the excellent quality of the Perfumes themselves, (2) their price. The object kept in view is not to produce goods which may be sold at a given price and leave a given margin of profit, but to produce such as shall equal or surpass a given standard of quality.

BERDOE'S TRIPLE

In PLAIN STOCK BOTTLES of 20 oz., 10 oz., and 5 oz.	£ s. d.
Ess. Bouquet	
Frangipane	
Jasmin	
Jeckey Club	
Millefeurs	
New Mown Hay	
Oponox	
Patchouli	
Rondeletia	
Stephanotis	
Ylang Ylang	
per 20 oz.,	0 8 7
per 10 oz.,	0 4 4
per 5 oz.,	0 2 3



FRENCH ESSENCES.

	£ s. d.
Violets	
Wood Violet	
White Rose, 20 oz., 9s. 10d.; 10 oz., 5s. 1d.;	
5 oz., 2s. 7d.	
Eau de Cologne	
Lavender Water	
per 20 oz.,	0 4 4
" 10 "	0 2 3
" 5 "	0 1 2

Berdoe's Perfumes, in Handsome Show Bottles for the Counter, Rose Cut Stoppers, Vitrified Opal Shield Labels with Gold Border and Black Letters, from 11s. 6d. each.

Established A.D. 1746.

F. NEWBURY & SONS.

1 & 3 KING EDWARD STREET, LONDON, E.C.

PARIS EXHIBITION, 1889.

PRIZE MEDAL AWARDED TO



"SALVO PETROLIA"

(VASELINE).

Absolutely Genuine Paraffinum Molle of the very Purest Form, and we claim that it is superior to Vaseline.

Packed in Tins, 1, 4, 10, 14, 28, 56, and 112 lbs.

"OLEUM DEELINÆ"

(REGISTERED).

Universally adopted by the Medical Profession for

ECZEMA,**OPHTHALMIA, SCURVY, RINGWORM,****ITCH, PILES, SKIN DISEASES,**

FOR

EXTERNAL & INTERNAL IRRITATION OF EVERY KIND.

PACKED IN CASES—

One Doz. 1s. 6d. Bottles; One Doz. 2s. 6d. Bottles or half of each.

TESTIMONIALS MAY BE HAD UPON APPLICATION.

"EDIBLE SALVO PETROLIA"

For Public Speakers, Actors, & Singers.
1s. per Tube.

The above are Manufactured Solely by the Proprietors,

THE DEE OIL COMPANY, LIMITED.

Works—SALTNEY, CHESTER.

OFFICES:

LONDON — 38 LEADENHALL ST., E.C.

Liverpool, Dublin, Manchester, Glasgow, Hull, Cardiff,
Bristol, Belfast, Barrow-in-Furness, Nottingham,
Paris, Hamburg, &c.

"Cream of Magnolia."

MATCHLESS FOR THE COMPLEXION.

A Marvellous and Unique Preparation for Softening, Toning, and Beautifying the Skin.
INVALUABLE for removing Spots, Sunburns, Blotches, and all Imperfections.

IMPARTS A VELVETY SOFTNESS AND BLOOM.

Renders it Beautiful to the Eye, and deliciously soft to the Touch. Can be used with the most perfect safety to any child or infant.
In Bottles, post free, 2s. 6d., 4s., 7s., and 10s. 6d., or Sample Bottles, post free, 1s. 3d. direct from the Proprietor.

JOHN STEEDMAN,

154 QUEEN'S ROAD, BAYSWATER, LONDON, W.

And of all Chemists throughout the World.

ESTABLISHED 1836.

Ladies once using this Preparation will never be without it.

Trade Mark.



Registered.

THE

ASSOCIATION for the SUPPLY of PURE VACCINE LYMPH,

12 PAUL MALL EAST, LONDON, S.W.

SOLE AGENTS FOR DR. WARLOMONT'S CALF VACCINE.

Tubes, 2s. each; Half Tubes, 1s. each. Pomade in vials, 5s.
HUMAN VACCINE, from healthy children only, microscopically examined and source quoted. Tubes, two-thirds full, 1s. 3d. each; Tubes one-third full and Lancet-charged points, 1s. each; Pin-points, 1s. 1d. each. Eighteen charged Small Points, 5s. Tubes, two-thirds full (same as those mentioned above, but without source), in quantities for export, £5 per 100 Tubes. Pin-points uncharged, 1s. per dozen. Vaccine Ejectors, 1s. 3d. each, including postage. Vaccinations by appointment. P.O.O.'s (including postage, and crossed London and Westminster Bank) with orders, payable to
EDWARD DARKE Secretary.

Office hours, 10 to 4. Saturdays 10 to 2.

BAILEY'S

PATENT

BRUSHES

The Latest Novelty is our

RUBBER

Complexion Brush.

Price 3s. 6d. each.

PACKED IN A NEAT BOX.

Entirely does away with poisonous cosmetics and face-washers. Used in the ordinary daily ablutions, with a little soap, it makes the skin beautifully fresh, soft, and smooth, and effectually eradicates all blemishes, blotches, pimples, &c. Used as a shampoo brush, gentlemen will find it a most useful adjunct to the toilet, as it entirely removes scurf and dandruff. Mothers and nurses will find it invaluable for bathing the delicate skin of infants and children.

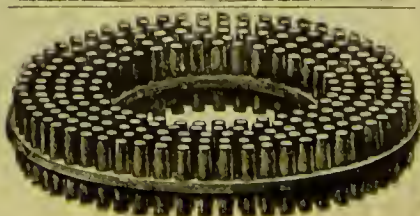
Prices—Bath Brushes 5s.; Toilet Brushes, with Handles, 1s. & 2s. each; Tooth Brushes, 10d. & 1s.

Bailey's New
Rubber Teething
Ring.

Is perfectly tasteless, and so constructed that the flattened teeth serve to expand the skin of the gums, softening the latter, and aiding the coming tooth without irritation. Price 6d.

Of all Chemists & Dealers in Toilet Goods or direct from the Manufacturers.

DAVID MOSELEY & SONS,
14 Aldermanbury Avenue,
London, E.C.;
Manchester; Glasgow;
Brussels and Paris.



SACHET POWDERS

The interest attaching to the increased demand for dry perfumes makes the subject just now of special importance. On account of the limited demand heretofore there has been no active competition in the manufacture of Sachet Powders. This fact will in a great measure account for the wide difference noticeable in the quality put out by different makers. The greater proportion of these powders contain only the ordinary showy filling of rose leaves, fragrant woods, buds and roots, which have little more life than dried autumn leaves when compared to a fragrant perfume. Can Sachet Powders be made to give as good satisfaction as the Extracts? Yes; if you know how to use them. Work boxes, handkerchief and glove cases may be lined with these powders, so as to give off their perfumes indefinitely. Kid gloves and dressed leather of all kinds may be more delightfully perfumed with Sachet Powders than with any of the liquid perfumes, and, too, without the risk of soiling. Sealskin, sable, and other fur may be given a delicate perfume with these powders. It often happens that the pelts of fine furs are not perfectly dressed, and in time acquire a peculiar odour, especially when subjected to dampness. Sachets, placed amongst such furs, will permanently improve and sweeten them. How many odours is it advisable to make? Not over a dozen. Why? Because the range of material is limited, and a few well-combined odours will meet the public demand even better than a long list, many of which are but reproductions of the same odour. Druggists should carry not less than six odours, in 8-ounce or 16-ounce glass-stoppered bottles, for supplying those who do fancy work, and others wanting them in bulk. Then a few dozen packets in satin, lettered in gilt, for placing in trunks and drawers. The six odours most popular are White Rose, Jockey Club, Violet, New Mown Hay, Heliotrope, and Frangipanni.

SATIN PACKETS, Lettered in Gilt ... 1.75 dollar per dozen



Facsimile of the $\frac{1}{4}$ -lb. Size.

The following are put up in glass-stoppered bottles.—One ounce, in 2-ounce bottle, 4 dollars per dozen. Quarter pound, in 8-oz. bottle, 12 dollars per doz. Half pound, in 16-oz. bottle, 24 dollars per doz.

Catalogue and New Supplement sent on application.

C. A. MANN & CO.

48 MURRAY STREET, NEW YORK.

PRIZE MEDAL, PARIS, 1889.

"NOT TO KNOW THESE ARGUES ONESELF UNKNOWN."

WARRICK

Real Heliotropes



BROTHERS'



Real Roses

18 Old Swan Lane,

LONDON, E.C.



Real Violets

* DELICIOUS + CACHOUS. *

3/- per lb., Splendidly Labelled.

4/- per dozen boxes, Gold Embossed on Calf.

WHITE AND SOUND TEETH.

JEWSBURY & BROWN'S

ORIENTAL TOOTH PASTE.



This old-established and increasingly favourite Dentifrice has been over Sixty Years before the Public. It is warranted to retain its properties and keep in good condition in any climate. The original and only genuine is manufactured solely by

JEWSBURY & BROWN, Chemists, MANCHESTER,

and is distinguishable by the Trade Mark, printed in red and green, a facsimile of which is annexed. Particular attention should be paid to this guarantee of genuineness, as numerous imitations are offered. Sold universally by Chemists and Perfumers, at 1s. 6d. and 2s. 6d.

The Trade and Shippers supplied by the leading houses in London and elsewhere. Bills and Show Cards forwarded on receipt of address cards and directions for enclosure.

PUREST

BRAND—

"S. SERAPHIMOFF,"

OTTO

Distiller & Exporter,

KEZANLIK, BULGARIA.

SOLE

CONSIGNEES—

FUERST BROS.

4 COPTHALL BUILDINGS, LONDON, E.C.

Telegrams—"Fuerst London."

Telephone No. 462.

OF

ROSE.

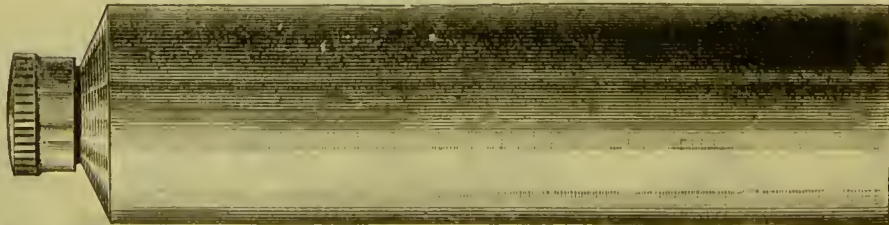
[4]

"Second to none." All buyers desiring absolute purity and guaranteed excellence should write for Samples and Prices.

METALLIC COLLAPSIBLE TUBES FOR PAINTS,

Perfumes, Shaving Creams, Soaps, Oils, and all Fluid or Semi-Fluid Substances.

FOR CREAMS & SOAPS.



H. G. SANDERS & SON, Manufacturers,

Victoria Works, Victoria Gardens, Notting Hill Gate, LONDON, W.

TELEGRAPHIC ADDRESS: "COLLAPSIBLE LONDON."

[3]

ESTABLISHED 1820

NOTE REDUCED PRICES OF QUININE PILLS.

LIST OF "McK. & R." CAPSULE^D PILLS
OF THE BRITISH PHARMACOPŒIA AND OTHER STANDARD AUTHORITIES.**McKESSON & ROBBINS,**

WHOLESALE DRUGGISTS AND MANUFACTURING CHEMISTS,

ESTAB. 1833.]

NEW YORK, U. S. A.

[ESTAB. 1833.]

Supplied by the Principal Wholesale Houses in the Trade throughout Great Britain and Ireland.

The reputation of Gelatine-Coated Pills has been created by our manufacture.	DOZ. BOTTLES containing containing 25 100 PILLS. PILLS.		Being completely sealed, all substances are perfectly preserved from oxidation.	DOZ. BOTTLES containing containing 25 100 PILLS. PILLS.	
Aloin	$\frac{1}{2}$ gr.	5/ 16/	Quinine, Bisulphate	$\frac{1}{2}$ gr.	5/ 18/
"	$\frac{1}{2}$ gr.	6/ 20/	" "	1 gr.	5/ 18/
"	$\frac{1}{2}$ gr.	7/ 24/	" "	2 gr.	5/ 18/
"	1 gr.	11/ 40/	" "	3 gr.	7/ 26/
" Compound		7/ 24/	" "	4 gr.	9/ 34/
" and Strychnine		7/ 24/	" "	5 gr.	11/ 42/
" Strychnine and Belladonna		7/ 24/	" Sulphate	$\frac{1}{2}$ gr.	5/ 16/
" or Aperient, No. 1 (Clark)		9/ 32/	" "	1 gr.	5/ 16/
" " No. 2, No. 3, No. 4		7/ 24/	" "	2 gr.	8/ 20/
Morphine Muriate	$\frac{1}{2}$ gr.	7/ 24/	" "	3 gr.	8/ 28/
" "	$\frac{1}{2}$ gr.	9/ 32/	" "	4 gr.	10/ 36/
Narcotic Extracts (Brown-Sequard)		15/ 56/	" "	5 gr.	12/ 44/

A Complete List of Formulas and Prices will be mailed promptly on application.

In ordering, be careful to specify "McK. & R." CAPSULE^D PILLS.

Originated 1870, by McKESSON & ROBBINS, New York, U.S.A. Merchants, Shippers, and the Wholesale Houses in the Trade are supplied by Messrs. S. MAW, SON & THOMPSON, 7 to 12 Aldersgate Street, London, E.C.; Messrs. BURROUGHS, WELLCOME & CO., Snow Hill Buildings, London, E.C.; and Messrs. HOCKIN, WILSON & CO., 38 Duke Street, Manchester Square, London, W.

TOWLE'S CHLORODYNE

In COUGHS, ASTHMA, BRONCHITIS, INFLUENZA, &c., its effects are truly wonderful, immediately relieving the tightness of the Chest, allaying irritation of the Throat, promoting Expectoration, and speedily and effectually subduing the Cough.

It soothes the weary aching of CONSUMPTION, relieves the harassing Cough, and often prevents those sleepless nights so trying to the sufferer.

In CHOLERA, DIARRHŒA, DYSENTERY, &c., it has proved itself a most valuable specific, quickly relieving the pain and spasms, and seldom failing to check the disease; for which property, as well as for its value in Sea Sickness (for which it is the best remedy known), it should be an indispensable article in every emigrant's outfit.

TESTIMONIALS.

"Superior to every other I have tried."
F. H. GREEN, M.R.C.S.
Rochdale Dispensary.

"Peculiarly serviceable in Bronchial, Spasmodic, and Neuralgic Affections."
ALFRED ASPLAND, F.R.C.S.,
Consulting Surgeon to Ashton Infirmary.

"I have used it largely in Spasmodic and Painful Affections, Bronchitis, and Neuralgia. It has the property of being readily combinable in ordinary prescriptions—an advantage over all similar preparations."

R. TRAFFORD WHITEHEAD, M.R.C.S.

A Surgeon writes:—"In Diarrhœa, Colic, Ague, Spasms, I have found it relieve more pain and cause more joy than any other article that can be named. Has proved itself a specific against sea-sickness."

Island Bridge, Dublin.

"I am pleased to say that although I have not finished a quarter of the bottle (2s. 9d.) the pain has left my chest, and the cough is almost well."—J. BROWN.

Immediately Relieves
COUGHS,
CONSUMPTION,
ASTHMA,
BRONCHITIS,
TIC,
SPASMS,
HYSTERIA,
DIARRHŒA,
DYSENTERY,
CHOLERA,
CRAMP, AGUE,
Sea-Sickness, &c.

REVISED PRICE LIST.

	Retail s. d.	Per doz £ s. d.
Towle's Chlorodyne	1 1/2	0 8 6
Ditto	2 9	1 3 0
Ditto (3 fluid oz.)	4 6	1 18 0
Ditto (8 ")	11 0	4 13 0
Liq. Chlorodyne (Original and only Genuine Preparation) 1/2 lb.	2/6 each	
Ditto ditto 1/2 lb.	4/6	
Ditto ditto 1 lb.	8/-	
Winchester Quarts (6 lb.) 7/6 per lb., bottles free.		
Towle's Antibilious Pills	1 1/2	0 8 6
Ditto	2 9	1 3 3
Towle's Chlorodyne Lozenges }	0 7/4	0 5 6
Ditto Jujubes }	1 1/2	0 8 0
Ditto in bulk, bottles containing 1 lb., 2/9 each.		
Ditto ditto 1 lb. 10 oz., 4/6		
Ditto ditto 4 lb., 10/-		
N.B.—The Commissioners will allow them to be sold by the retailers without further duty, provided they are simply wrapped in paper, and not enclosed in a box, bottle, or packet.		
Thornton's Celebrated Toilet Cream	1 0	0 9 0
Ditto	1 6	0 14 0
Ditto	2 6	1 4 0
Amboline (Registered Trade Mark)	2 6	1 4 0
The Thornton (Red) Lotion (Stamped)	2 6	1 4 0
Thornton's Paragon Hair Wash	1 0	0 9 0
Ditto	2 6	1 4 0

Posters, Bills, and Showcards on application.

£5 worth (assorted or otherwise) Carriage Paid.

7 lb. Lozenges and upwards stamped with Chemist's own name, free of charge.

A. P. TOWLE & SON.

75 BACK PICCADILLY,
MANCHESTER.

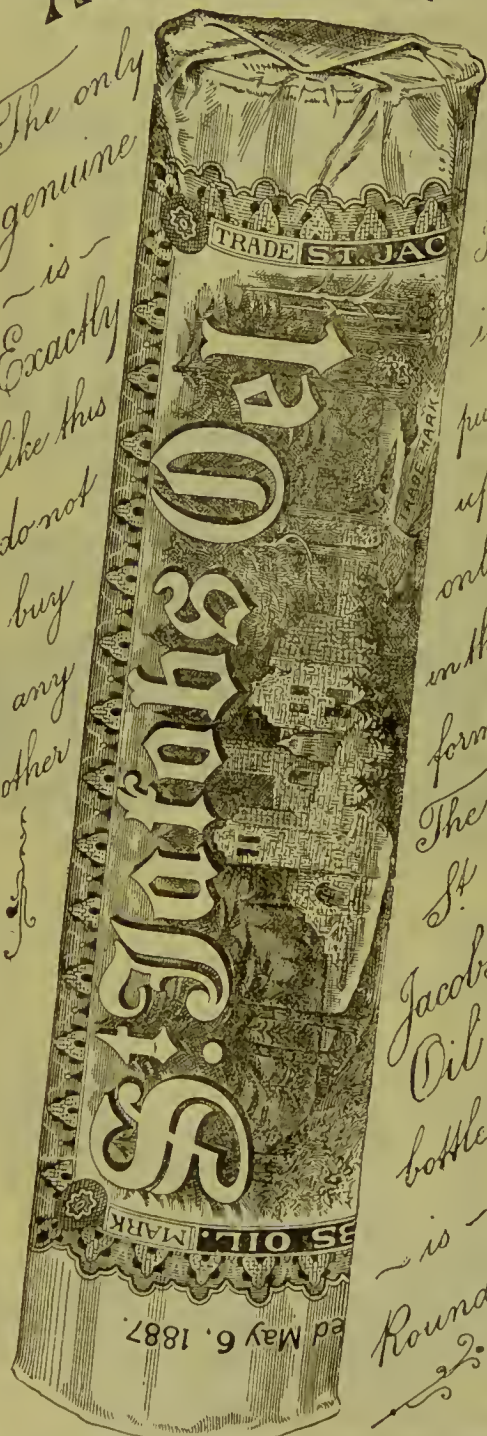
IMPORTANT NOTICE.

REMEMBER

*The only
genuine*

*is —
Exactly
like this*

*do not
buy
any
other*



It

is

put

up

only

in this

form.

The

St.

Jacobs

Oil

bottle

is —

Round

Our attention has been called to the fact that certain unprincipled persons are selling in the Market Places, in some of the Provincial Cities and Towns, receipts purporting to be true Formulas of ST. JACOBS OIL and other standard Proprietary Medicines. As none of these Formulas correspond at all with the ingredients which enter into the manufacture of ST. JACOBS OIL, and the selling of same purporting to be a correct Formula of ST. JACOBS OIL, is a criminal offence, we will thank any Chemist to furnish us the names and addresses of such people, or any information connected therewith, which favour we shall not only appreciate but will duly reciprocate, if the evidence is such as will enable us to convict the persons named.

We trust that all Chemists who appreciate fairness in Trade, will assist us in bringing such parties to justice.

LOOK ALSO FOR THE SIGNATURE OF

The Charles A. Vogeler Co.

THE CHARLES A. VOGELER CO.

45 FARRINGTON ROAD, E.C.

A READY TEST.

LONDON.]

MARCH 15.

[1890.

When we consider the spirit of imitation seriously, it is a good plan to collect the fullest amount of information relating to the substance in question and compare facts.

The Kepler Malt Extract has acquired an unparalleled notoriety as a perfect preparation of its kind, chiefly on account of its richness in diastase (the vegetable *ptyalin*), this ferment being the resulting product by decomposition of the gluten which exists in the barley. The dextrin in the Kepler Malt Extract is also an important factor in the treatment of disease. If, as should be the case, our specimen of Malt Extract has undergone no alcoholic fermentation, *dextrin* will be present in large quantities. This body, which is a poly-saccharate possessing the formula $(C_6H_{10}O_5)_x$, constitutes nearly one-third of the result of the action of diastase upon starch. Probably at least three different dextrins are thus produced, viz., amido-dextrin, erythro-dextrin, and achroo-dextrin. These bodies are incapable of direct fermentation, but in the presence of diastase they undergo alcoholic fermentation with yeast.

Malt Extract which has undergone fermentation leaves little dextrin behind, the whole having been converted first into *glucose*, and then partly into alcohol.

The physiological action of malt dextrin is to stimulate gastric secretion, and so assist debilitated digestive functions in the performance of their duty.

Proteids exist in malt chiefly as albumen, vegetable casein, &c., and are considered to be an important factor in repairing defective nutrition.

The Kepler Malt Extract contains one-eighth part of such substances, either unchanged or as peptones.

MINERAL MATTERS.—These are in the form of phosphates derived from the grain; the Kepler Malt Extract contains 3 per cent. of these matters. We have, therefore, in the Kepler Extract of Malt a perfect concentrated tonic food, suitable for use in all cases of mal-assimilation and mal-nutrition.

TEST.

When a teaspoonful of the Kepler Malt Extract is mixed with a dish of warm thick oatmeal porridge or arrowroot, its digestive activity is immediately apparent by the food liquefying and the starch being transformed into assimilable sugar. If such digested food be then tested for sugar by Fehling's test, the sugar reaction will appear markedly manifest. The best "appearance" test for a good Malt Extract is its adhesiveness.

If alcoholic fermentation has been carried on, this adhesive principle (dextrin) has been converted into grape sugar at the expense of the diastase.

It is well, therefore, to avoid *cheap malt extracts*, for in these the bulk of extract has generally been the first consideration, and digestion has been carried on in the wort until the whole of the starch, dextrin, and proteids are converted into soluble saccharino products. This, then, is the reason why cheap malt extracts can be made. They are generally found of no more benefit as a food or digestive agent than treacle.

Kepler Extract of Malt and Kepler Extract of Malt with Cod Liver Oil (Kepler Solution) supplied to the Trade at 22/ and 38/ per dozen.

BURROUGHS, WELLCOME & CO., SNOW HILL BUILDINGS, LONDON, E.C.

ABOVE PRICES SUBJECT TO USUAL DISCOUNT.

UNGUENTUM LANOLINI (LANOLINE OINTMENT BASE).

On account of its sticky nature, Lanoline was objected to by some physicians, but this objection has now been overcome by the introduction of a Lanoline Ointment base—Unguentum Lanolini—which is applicable wherever, formerly, lard or any other old ointment bases have been used. Its advantages may be summed up as follows:—

1. It never turns rancid.
2. It is grateful to the tenderest skin.
3. It is non-sticky and can be readily washed off.
4. It is aseptic; no bacteria or microbes can live in it, or pass through a thin layer when spread over a fresh wound.

Lanoline (Lieberich) supplied to the trade in 1 lb. and 7 lb. tins at 2s. 8d. per lb. Anhydrous Lanoline (Lanolinum Anhydricum), at 3s. 4d. per lb. Lanoline Ointment Base (Ung. Lanolini), 2s. 2d. per lb. Anhydrous Lanoline Base, 2s. 10d. per lb. Lanoline Cold Cream supplied in pots at 14s. per doz. Lanoline Hazeline Ointment, in pots at 14s. per doz. Lanoline Pomade, in pots at 14s. per doz. Lanoline Toilet Soap, 8s. per doz. Lanoline Eucalyptine Soap, 8s. per doz. Lanoline Pinol Soap, 8s. per doz. Toilet Lanoline, in tubes at 4s. 6d. per doz. Lano Creolin, in tubes, at 9s. per doz.

Above Prices Subject to Usual Discount.

BURROUGHS, WELLCOME & CO, SNOW HILL BUILDINGS, LONDON, E.C.

See Recommendatory Notice of Medical Press and Opinions of the leading Dermatologists.

WRIGHT'S

Of all Druggists, Wholesale and Retail, throughout Great Britain, Ireland, and Colonies.

From the *Lancet*, Dec. 22, 1886:—"In our hands it has been a most effective agent in skin diseases, especially of the chronic eczematous class, and one class of psoriasis which had resisted all other kinds of treatment speedily got well under the application of the *Liquor Carbonis Detergens*. We esteem it a very valuable addition to our list of skin remedies."

1871:—"We have tested it, and can affirm its value as a detergent agent. We consider the *Liquor* is an article of great utility."

Kept in stock and sold by all Druggists (Wholesale and Retail) throughout the United Kingdom and Colonies.

PROPRIETORS—

W. V. WRIGHT & CO., 48 Southwark Street, LONDON.

LIQUOR

CARBONIS

DETERGENS.

Extract from the Proceedings of the Royal Society of Edinburgh:—"Experiments on the Chief Disinfectants of Commerce, with a view of ascertaining their power of destroying the spores of the 'Anthrax Bacillus,' by a Medical Officer of Health and Public Analyst. A 10 per cent. solution of *Liquor Carbonis Detergens*, acting for four hours, distinctly retarded growth of *Anthrax*, for the spores, whether in gelatin-pork or in the broth, did not commence developing for 24 hours. Undiluted *Liquor Carbonis Detergens*, acting for four hours, arrested future growth."

The *Practitioner* of September, 1881:—"Eczema connected with varicose veins of the leg—also Pruritus Scroti, Labiorum, and Ani—is best relieved by weak tarry lotions, one of the best of which is *Wright's Liquor Carbonis Detergens*."

P. McLeod, Colonel R.A., Inspector-General of Ordnance, Ordnance Office Madras, writes Sept. 10, 1887:—"I can certify that '*Liquor Carbonis Detergens*,' has cured me of a Psoriasis of 21 years, incurred in Burma, after every effort of such an able skin doctor as Sir Erasmus Wilson had failed."

From the *Medical Times and Gazette* Jan. 19, 1867:—"We have more than once called attention to the value of this remedy in chronic eczema."

From the *British Medical Journal*, Sept. 22,



THE GREAT VEGETABLE BLOOD PURIFIER

SWIFT'S SPECIFIC

KNOWN AND APPRECIATED THROUGHOUT THE CIVILIZED WORLD. ITS SUCCESS IN THE TREATMENT OF ALL DISEASES THAT RESULT FROM BLOOD TAIN OR BLOOD POISON HAS BEEN UNPRECEDENTED, THOUSANDS WHO HAVE BEEN GIVEN UP AS HOPELESSLY DISEASED, HAVING BEEN HEALED AND MADE HAPPY BY ITS HEALTH-GIVING PROPERTIES. IT Cures Scrofula, Eczema, Rheumatism, Old Sores, Cancer, Catarrh, Contagious Blood Poison, &c.

AND CONTAINS NO MERCURY, IODIDE OF POTASH, ARSENIC, NOR ANY OTHER POISONOUS DRUG.

Books on Contagious Blood Poison, and on Blood and Skin Diseases, posted free.

THE SWIFT SPECIFIC COMPANY

35 SNOW HILL LONDON. E.C.

MARION'S PHOTO SUPPLY WAREHOUSE.

MARION'S Britannia Plates.
MARION'S Instantaneous Plates.
MARION'S Chloride Transparency Plates.
MARION'S Bromide Opal Plates.
MARION'S Portrait Chloride Opals.
MARION'S French Mounts for Photographs.
MARION'S Albuminised and Ready Sensitised Papers.
MARION'S Bromide and Carbon Papers.
MARION'S Cameras and Lenses.

Agents for Voigtlander's Celebrated Lenses.

KRUGENER'S PATENT BOOK CAMERA.

Takes 24 photos; can be carried in the pocket. Reduced Price 45s.

MCKELLEN'S PATENT DETECTIVE CAMERA.

For plates 4½ x 3½. The only Camera in which the exact image can be seen on the screen at the moment of exposure. Price £9 9s.

MARION'S PHOTO OUTFITS.

From 21s. to £50.

EVERY REQUISITE FOR PHOTOGRAPHY.

22 & 23 SOHO SQUARE, LONDON, W.



ESTABLISHED 1859.

PRINCIPAL OFFICE, 42 CANNON STREET, LONDON, E.C.

BRANCH OFFICES:

MELBOURNE, SYDNEY, AND NEW YORK.

Published every Saturday.

Subscription 10s. per year, payable in advance; dating from the commencement of any month.

Supplied only to persons connected with the Trade.

Post free to every country in the world. Single copies 4d. each.

Cheques or Postal Orders should be payable to EDWARD HALEM, and crossed MARTIN & Co.

Supplied regularly to every member of the following Societies, who have adopted THE CHEMIST AND DRUGGIST as their official organ:—

The Pharmaceutical Association of New Zealand.

The Pharmaceutical Society of Queensland.

The Pharmaceutical Society of South Australia.

The Hobart Chemists' Association.

The Launceston Pharmaceutical Association.

South African Pharmaceutical Association.

For Australasian subscribers the subsidiary journal, THE CHEMIST AND DRUGGIST OF AUSTRALASIA, is included.

Literary Contents.

	PAGE		PAGE
Analysts' Notes	368	General and Provincial News..	350
Bankruptcy Reports	361	German Pharmaceutical News	366
Commentary	364	Legal Reports	357
Correspondence:—		London Chamber of Commerce:	
Reform of the Pharmaceu-		Chemical Section	355
tical Society; North of		Metropolitan Reports	348
England Pharmaceutical		New Companies	367
Association; Lectures for		Notes from Kew	368
Pharmacists; Dressing		Pharmaceutical Society of	
Skins	375	Great Britain:	
Dispensing Notes	376	Papers Read at Evening	
Legal Queries	378	Meeting	352
Miscellaneous Inquiries	377	Pharmaceutical Society of Ire-	
Editorial Notes:		land	354
Chemists' Profits	362	Post-card Competitions: Awards	367
The Legitimate Demands of		Practical Notes and Formulae..	369
Chemists; The Drug Trade		Provincial Reports	348
in Council	363	Trade Notes	351
French Pharmaceutical News..	366	Trade-marks applied for	361
Gazette	360	Trade Report	370

CIRCULATION TO MERCANTILE FIRMS.

WE shall aim to send copies of our next week's issue (March 22) to every firm in the United Kingdom who export any kind of druggists' goods. We want all such houses to keep THE CHEMIST AND DRUGGIST on file as a guide when filling indents. It is a little difficult to be sure of having the names of all such merchants, as a good many houses do not ship in their own names, but as nearly as can be our list is complete. Manufacturers of specialties and of all druggists' goods should be careful to have their announcements in that important issue.

POST-CARD COMPETITION FOR MARCH, 1890.

NAME on a post-card the six most popular prescribers in the United Kingdom.

The usual prize of one guinea will be awarded to the competitor whose list comes nearest to the general consensus, but in the event of several forecasting the exact result we reserve the right to divide the prize.

Competitors must be subscribers or their employes. No

cards will be accepted for competition which reach us after March 31.

SPECIAL NOTICE.

WE have announced previously that separate lists for different parts of the United Kingdom might be sent in. There seems to be but little inclination to take advantage of this proposal, and as it only creates confusion, we cancel that part of the competition. The prescribers named on every post-card will therefore be taken as being given in the general competition.

RECENT RECOMMENDATIONS.

MEL ROSE.—E. Daenen, a Brussels pharmacist, states that by the following method he obtains a bright rose-coloured, transparent, and delightfully odorous preparation. Infuse 100 grammes of bruised red-rose petals with 400 c.c. boiling distilled water for six hours. Strain, again infuse for six hours in 200 c.c. of boiling distilled water, and repeat, if necessary, with another 200 c.c. Mix the infusions, and evaporate to 170 grammes, filter, and in the filtrate dissolve 500 grammes of clarified honey, and 330 grammes of white sugar.

INSECT POWDER is, according to a Continental house, adulterated sometimes with the flowers of *Chrysanthemum leucanthemum*; but this should not be difficult of detection, as, according to Unger, true insect-powder yields 6.9 per cent. of ash, whereas the powder of *C. leucanthemum* flowers yields as much as 10.1 per cent. of ash containing manganese, a constituent which is not found in the other.

HELIOTROPE PERFUME.—Mr. E. Campe proposes the following formula in the *Chemiker und Drogist* for a perfume for retail sale:—

Oil of bergamot	1½ oz.
Vanillin	8 grains
Tincture of benzoin	2 drachms
Rectified spirit	60 oz.

Solve.

DEPILATORY.—According to *Pharm. Centralhalle* an effective depilatory is made by mixing 2 parts of barium sulphide with 1 part of starch and 1 part of oxide of zinc. The barium sulphide can be made fresh, as required, by mixing powdered barium sulphate with its own weight of charcoal, making into a stiff paste with linseed oil, and forming the mass into a roll like a sausage, which is to be placed in the fire until deflagration is complete. After cooling the mass is to be powdered, and mixed with the starch and oxide of zinc. The depilatory is to be made into a paste with water before use, spread on the skin, and allowed to remain for ten minutes. The success of depilatories greatly depends upon the freshness of the sulphide employed.

PREPARATION OF OXYGEN.—According to Volhard, small quantities of oxygen can be prepared in a Kipp's apparatus by the action of hydrogen peroxide on bleaching-powder. Nitric acid is added in sufficient quantity to neutralise the lime in the bleaching-powder. The oxygen contains a trace of chlorine.

QUININE PILLS.—M. Edmond Sohét recommends in *Bull. Soc. Roy. Phar. Brux* the use of 3 drops of lactic acid to 16 grains of quinine sulphate. This, he says, makes an excellent pill-mass, and the excipient is equally suitable when other ingredients than quinine form part of the pill-mass.

Metropolitan Reports.

CHEMISTS' ASSISTANTS' ASSOCIATION.—At a meeting on March 20 a paper on "Antipyrine and its Incompatibles," by E. J. Millard and A. C. Stark, will be read.

GUY'S HOSPITAL.—We are informed that Mr. Gladstone has kindly consented to open the new Residential Medical College at Guy's Hospital on Wednesday, March 26, at 3 P.M.

CHEMICAL SOCIETY.—At the meeting on Thursday, March 20, at 8 P.M., Professor Judd, F.R.S., will deliver a lecture on "The evidence afforded by petrographical reasearch of the occurrence of chemical change under great pressures."

STEALING DRUGGISTS' SUNDRIES.—At Dalston Police Court on Thursday, before Mr. Horace Smith, Joseph Steel, aged 14, a warehouse boy, of Valentine Road, Hackney, was charged with stealing a piece of court-plaster, the property of his employer, Mr. Robert Orrock, dealer in druggists' sundries, of Hackney Wick. Mr. Romain, who prosecuted, said Mr. Orrock did not wish to press the case unduly, but from the fact of having lost several articles, menthols, &c., he was obliged to prosecute. Prisoner, who confessed to having stolen stamps, court-plaster, and menthols, was kept in custody for a day, and then cautioned and allowed to go.

Provincial Reports.

Items of news, and newspapers containing matters of interest to the trade, sent to the Editor will much oblige.

BIRMINGHAM.

MIDLAND COUNTIES' CHEMISTS' ASSOCIATION.—At the meeting to be held at the Mason College, Edmund Street, on Tuesday evening next, at 8.30, W. B. Featherstone, Esq., M.D. (London), will read a paper on "The Occasional Poisonous Action of Certain Drugs."

ALLEGED HOSPITAL ABUSE IN BIRMINGHAM.—The Mayor has issued a circular stating that the judge of the Birmingham County Court has consented to act as chairman of the suggested committee of inquiry into the alleged abuses of the medical charities of the city. His Worship suggests that four members representing hospitals (not being medical men), one representing the Hospital Saturday Committee, and three representing the medical profession, together with the chairman, should constitute the committee.

A MUNIFICENT GIFT.—Mr. Richard Cadbury, of Moseley Hall, a member of the firm of Cadbury Brothers, has addressed to the committee of the Birmingham and Midland Sanatorium a letter containing an offer of the hall where he resides and a large area of land as a sanatorium for women and children, together with a sum of 30,000*l.* for the purpose of adapting the property to its new use and endowing the institution. There are about 20 acres of land attached to the buildings. In the rules of management proposed it is provided that no stimulants shall be used except under medical orders. Mr. Cadbury's offer has been accepted with gratitude by the committee of the Birmingham and Midland Sanatorium.

CARDIFF.

POISONING CASE.—An inquest was held on Monday touching the death of Mr. Charles Hibbert, draper, Gorseion, who was found dead in one of the bedrooms at the Central Coffee Tavern, Cardiff, on Sunday morning, and it was supposed that he had committed suicide. Mr. E. J. Coleman, chemist and druggist, of 8 High Street, stated that the deceased came to his shop on Saturday afternoon, and asked for rat poison in packets, and refused to take

phosphorous paste. Deceased purchased two packets of "Battle's vermin-killer," and signed himself in the book "W. C. Howard, Cockett, Swansea." Dr. Downing having deposed that deceased died from poisoning, the jury returned a verdict accordingly.

HANLEY.

TRAVELLING MEDICINE DEALERS.—At the Hanley County Court, on March 12, an action, remitted from a superior court, was heard, by which Arthur Redmondi and Philip Levine sought to recover from the North Staffordshire Railway Company 200*l.* damages, sustained by reason of the company having wrongfully deprived the plaintiffs of the possession of a quantity of patent medicines. The plaintiffs, it was stated, trading as the Cherokee Indian Medicine Company, travelled from town to town for the purpose of vending patent medicines. On July 22 last they consigned by the company's line, for conveyance from Burton to Hanley, seven cases containing their medicines, but finding that a rival, calling himself "Sequah," was already located there, they gave instructions for the cases to be sent on to Longton. The company failed to deliver the medicines at Longton until July 30, in consequence of which the plaintiffs lost the expenses incurred and the profits upon the business they might have done, while the value of the medicine was 17*l.* It was ascertained by the plaintiffs that the railway officials delivered the medicines to their rival "Sequah," who kept them until the close of his visit, and then returned them to the railway company. The defendants had admitted their liability by paying 5*l.* into court. In cross-examination it was elicited that Levine, the co-plaintiff, was now in the service of "Sequah," that Redmondi sometimes appeared at music-halls as an illusionist, and that the wholesale price of the medicine was 2*l.* 12*s.* per gross, or about 5*d.* per bottle. For the defence, witnesses were called to show that while the goods were lying at Hanley station two men called and inquired after them in the name of Redmondi and Levine, and by their instructions the cases of medicine were delivered at the Saracen's Head Hotel. The receipt for the goods was signed by "Sequah," the person who received them saying, when asked by the defendant's drayman if he was Redmondi, "Oh, it's all right; we now sign under the new name." After hearing evidence, the jury gave a verdict for 12*l.*, and judgment was entered for the plaintiffs, with costs.

LIVERPOOL.

DOCK LABOURERS' STRIKE.—This has now become so general that considerable inconvenience is felt and great loss is occurring to ship-owners and exporters. A considerable quantity of goods, including drugs, are now lying at the docks, some of which are known to have been telegraphed for and are urgently required. The men still hold out, and at present it seems probable that they will not return to work until their demands are conceded.

PHARMACEUTICAL STUDENTS' SOCIETY.—About eighteen months have elapsed since this association was formed, with every prospect of a successful career; over forty members have been enrolled, several excellent papers have been read, and some pleasant social evenings have been spent. The question naturally arises, Why should not such an organisation flourish? Already, however, there are signs of weakness, and on two occasions recently the attendance has been so small that the meetings have been adjourned, last week only about half-a-dozen being present. The president and officers are most energetic, but they cannot alone achieve the objects aimed at; the members one and all should exert themselves to make the meetings such as to encourage those who are able and willing to read papers, &c. The next meeting will be held on Thursday, 20th inst., at 8.30 P.M., when short papers will be read by Mr. A. Shaw, on "The Estimation of Pil. Pot. Permang.," Mr. R. H. Mitchell, on "Cannabis indica," and Mr. J. R. Johnson, on "Carum Ajowan."

CHEMISTS' ASSOCIATION ANNUAL DINNER.—The annual dinner of the members of this association was held on Thursday evening of last week, at the Royal Restaurant, Old Hall Street, Mr. Conroy in the chair. Among

those present were Messrs. T. F. Abraham (vice-president), R. Parkinson (hon. treasurer), J. Bain and J. S. Ward, F.C.S. (hon. secretaries), A. S. Buck, E. Davies, F.C.S., F.I.C., J. R. Day, H. O. Dutton, A. H. Samuel, F.C.S., J. J. Smith, W. R. Smith, W. Wellings, and H. Wyatt (members of the committee). In proposing the toast of the "Liverpool Chemists' Association," the Chairman said that so far they had held their own amongst provincial associations as regarded the papers and communications submitted to the meetings, but the attendance was far from being up to the mark. Financially they were strong and they had little difficulty in obtaining papers for the meetings, but unfortunately many of their members contented themselves with reading the trade journals, which was very disappointing to the authors of the papers. Only one out of every five or six of the chemists in the city and suburbs had joined them, and if they all joined they could set apart a fund for defensive purposes. They had a good and successful public analyst to save them from pitfalls, and he asked each and all of them to try and bring new members. At their meetings the Pharmacy Acts Amendment Bill and the sale of medicated wines had been discussed, and a petition had been sent to the Inland Revenue authorities stating fully their own case, and suggesting an *ad valorem* stamp instead of the wine license. They had also considered the Sale of Poisons and the Railway Rates Bills, and they had vigorously protested against the proposed classification schedules, and he believed that by the action of that association and other bodies they would have considerably reduced railway rates. In these and other matters, while they were looking after their own interests, they were helping other bodies, and they should be supported more generally by the members of their own profession. He deeply regretted the absence of their president, Dr. Symes, through a great bereavement, and expressed his own deep sympathy and the sympathy of those present with him in his trouble. The toast was acknowledged by Mr. H. Wyatt, who heartily approved of the suggestions that had been made by the chairman, and hoped that before long they would be acted upon. The other toasts included "The Pharmaceutical Society," proposed by Mr. J. S. Ward, and responded to by Mr. J. J. Smith; "The Wholesale Trade," proposed by Mr. T. F. Abraham, and suitably acknowledged; "The President" and "The Vice-Presidents and Officers." Between the speeches songs were sung by members of the association and friends. The arrangements throughout were most satisfactory.

MANCHESTER

THE SYPHON TRADE.—At the Manchester County Police Court, on Wednesday, two young men named John Gilson and William Rowley were charged with stealing several syphon bottles of soda water by means of a trick. The particulars as divulged by the evidence showed great ingenuity on the part of the prisoners. Their *modus operandi* was to go to a place where no deposit was required on syphons, and after paying for the mineral water in the bottles they took them away. They then visited a shop where a deposit was required, and on pretence that the syphons had been got there, received the deposit money of two shillings on each syphon. This system was carried on successfully for some time, until one of the victims found he had more syphons in his shop than he had sold. Information was given to the police, and the men were arrested.—The stipendiary remarked that the prisoners had evidently been making a good thing out of their illegal trading. Gilson was sent to prison for three months, and Rowley for two months.

SHEFFIELD.

THE INACCURATELY-DISPENSED PRESCRIPTIONS.—We hear that four summonses (three for spt. ammon. co. and one for ferri et quin. cit.) have been served on chemists in respect of the recently analysed medicines dispensed from prescriptions sent out by the Health Committee. Cautions have been issued in other cases. It has been arranged, we understand, that the borough analyst shall give a popular lecture, under the auspices of the local Chemists' Society, on the evening of the day on which the cases are to be tried.

"IT'S AN ILL WIND," &c.—Sheffield at present rejoices in having one of the highest death-rates in the kingdom. Influenza and its companions appear to be responsible to a great extent for this. Bronchitis and pneumonia have been particularly prevalent. Medical men agree in saying that they never remember having their hands so full. In the thickly-populated districts most of them are working night and day; the result has been that overwork has laid many of them up, and two have succumbed to pneumonia during the past week. Pharmacists are, naturally, finding some extra pressure.

IRELAND.

PHARMACY CLASSES.—The authorities of the Apothecaries' Hall of Ireland announce the resumption of pharmacy lectures on the same lines as heretofore.

A CHEAP ASSORTMENT.—For the modest sum of 3d. a Cork herbalist volunteers to forward curatives for consumption, gout, and ingrowing toe-nails.

CONTRACTS.—Tenders for a year's supply of paints, oils, disinfectants, &c., are invited by the directors of the Dublin, Wicklow, and Wexford Railway Company (March 18).

THE LIMERICK POISONER.—The sentence of death passed recently upon Michael O'Brien, who poisoned his father-in-law at Limerick, has been commuted to penal servitude for life.

WAKENING UP.—A vigorous effort is being made to revive the dormant energies of the Irish Pharmaceutical Chemists' Association, which for some time past has retired into partial obscurity.

STORE PHARMACY.—The Rathmines stores have added a drug and patent-medicine department, and are about engaging a pharmaceutical chemist with a view of opening a compounding-room on the premises.

A CORK COUGH CURE.—Through eating a portion of a belladonna plaster, given to him as a cough specific, a lad named Fooley was last week admitted into the Cork Infirmary. The usual antidotes were successfully applied.

FREEMASONRY FESTIVITIES.—In honour of their newly-installed master, Dr. Alexander Gordon, L.A.H., and councillor of the Pharmaceutical Society of Ireland, the Chapter and Lodge of Israel (126) are giving a grand banquet at Dublin.

A FATAL DRINK.—Through drinking a mixture of spirits of salt and water an army pensioner, named Linehan, has been fatally poisoned at Tralee. He obtained the mixture from Mr. Dowling, the local apothecary, on the pretence of wishing to clean clothes.

A CHEMIST SUES FOR FEES.—At the Court of Queen's Bench last week an application was made on behalf of the plaintiff, Mr. Roulston, chemist, Tyrone, to remit to the local court an action taken to recover 34l. 19s., including the cost of 26 bottles of medicines supplied at 1s. 6d. each. There being no resistance, the motion was accordingly granted.

"BOVRIL" appeared last Saturday in the Dublin Police Court in the person of a law-breaker of that name, whose escapade in "crib cracking" was rewarded with free lodgings in the Government hotel, where it is unlikely he will get any of the beef elixir. The company can take action for infringement of their trade-mark when Mr. B. emerges.

THE PLAN OF CAMPAIGN.—Mr. Morgau M. Darey, chemist and druggist, a tenant on the Smith-Barry estate, Tipperary, was last week evicted from his establishment for non-payment of rent. The local dispensary premises at Abbey Street were also seized by the landlord, who, it is said, will convert them into a police barracks.—A printed notice has been circulated in Cork warning the people that they must "boycott" such chemists as are known to supply "land-grabbers," police, and other obnoxious individuals.

IRISH DRUG CONTRACTS.—Tenders for a year's supply of druggists' sundries, medicines, drugs, and medical and surgical appliances, are invited on the undermentioned dates by the boards of guardians of the following poor-law districts:—Bailieborough Union and adjacent dispensaries

March 17; Bantry Workhouse and six neighbouring dispensaries, March 18; Bawnboy Union, March 17; Clones Union and three dispensaries, March 25; Coleraine Union, infirmary, fever hospital, and six dispensaries attached, March 22; Cork Workhouse and dispensary depôts, to be renewed on September 29; Cootehill Union and several dispensaries, March 21; Downpatrick Workhouse and outlying stations, March 22; Dunmanway Union and three dispensaries, March 22; Grauard Fever Hospital and workhouse, contract to be renewed in September next; Kilkeel Union, March 17; Kilmallock Workhouse and six dispensaries, March 20; Londonderry Workhouse, fever hospital, infirmary, and seven outlying dispensaries, March 15; Manorhamilton Workhouse and four dispensaries, March 20; Middleton Union and several dispensaries, March 15; Monaghan Workhouse and five dispensaries attached, March 19; Strabane Infirmary, workhouse, and six dispensaries, March 18; Tulla Workhouse and three dispensaries, March 18; and by the governors of the Roscommon County Infirmary, March 19. Surgical and medical appliances are also required by the General Prisons Boards. In all of these the contractors will be required to observe certain regulations referring to conveyance, packing, cartage, empties, forms of tender, and the orthodox brace of surties.

SCOTLAND.

ABERDEEN.

THE PHILOSOPHY OF EXTENSION.—Since Mr. J. Murison has floated and successfully disposed of his two last ventures in Skene Street and Footdee he has been prospecting for another suitable district, and has now made arrangements for fitting up a shop near the south end of Bonaccord Street.

CHEMISTS' ASSISTANTS' AND APPRENTICES' ASSOCIATION. The second musical evening of the session was held on Friday, March 7, in the North Silver Street Hall. Mr. Curtis, President, occupied the chair. There was a large attendance of members and friends. A lengthy and varied programme was submitted, consisting of piano and violin selections, banjo solos, songs, recitations, &c., preceded by an original prologue by Mr. McWilliam. The evening was an enjoyable one in every respect.

ALARMING EXPLOSION.—On Thursday, when Robert Calder, joiner, Kingsland Place, was engaged manufacturing gas for a lime-light entertainment, an explosion suddenly occurred, breaking the window glass and creating a scene of general disorder in the room. Strange to say, Calder escaped unhurt, but from the severity of the explosion and the loudness of the report a good deal of alarm was caused in the neighbourhood. It has since been ascertained that the explosion was owing to the fact that the chemist who filled the order supplied black antimony in place of black oxide of manganese.

ABERDEEN AND NORTH OF SCOTLAND SOCIETY OF CHEMISTS AND DRUGGISTS: ANNUAL MEETING.—The annual meeting was held on Monday, March 3, in the rooms of the society, 21 Bridge Street, Mr. John Johnston, the retiring president, occupying the chair. Now that monthly meetings are held the business was purely formal, and, after the reading of the minutes of the last annual meeting and the treasurer's report, a hearty vote of thanks was accorded to the retiring office-bearers. It was afterwards agreed that the whole of the retiring office-bearers be re-elected, and are as follows:—President, Mr. J. Johnston; Vice-President, Mr. J. P. Kay; Secretary, Mr. A. Strachan; Treasurer, Mr. J. Paterson; Librarian, Mr. J. Cruickshank; Curator, Mr. J. Clark; Auditor, Mr. W. Reid. Some of the office-bearers demurred to being re-elected, they holding the opinion that the honours should go round, but on account of the unanimous expression of the meeting they agreed to accept office for another year.

DUNDEE.

CHEMISTS' ASSISTANTS' AND APPRENTICES' ASSOCIATION.—At the meeting held on Thursday, March 6, Mr. William Mair read his prize essay on the progress of pharmacy, and Mr. James Petrie followed with his essay on the same subject. Mr. Moir also contributed a more practical note referring to recent improvements in pharmaceutical pro-

cesses, and the introduction of new remedies, and thereafter Mr. Petrie exhibited a sulphuretted hydrogen apparatus, which is used in the local university college. This is made on the same principle as Thompson's apparatus described in our issue of December 28.

EDINBURGH.

"HIGHLAND VIGOUR LINIMENT" is the latest notion that is being advertised by the gilded-car-and-four-horse method. The gilded car and the name are all the information disclosed as yet. Further development is awaited.

SCOTLAND AND THE PHARMACEUTICAL SOCIETY.—A comparison of the recently issued calendar of the Pharmaceutical Society with the previous issue discloses the information that the Society has seven adherents less in Scotland.

SIR DYCE DUCKWORTH will be amongst those who will receive the honorary degree of LL.D. from the Edinburgh University next month. He took his M.D. here. At the same time Dr. J. H. Gilbert, of Rothamsted, Sir John B. Lawes' associate in his life-long labours in agricultural chemistry, will receive the same degree.

General and Probine News.

TWO DRUG STORES in Broadway, New York, have recently changed hands for 250,000 dollars.

THE MORGAN CRUCIBLE COMPANY (LIMITED).—The 200,000, 6 per cent. preference shares in this company, offered the public this week, were subscribed three times over.

THE NOTTINGHAM DENTIST, W. E. H. Arnemann, who shot Mr. Bristowe, the judge of the Nottingham Court, last November, was sentenced at the Nottingham Assizes by Mr. Baron Pollock to penal servitude for twenty years.

A PHARMACIST'S MUNIFICENCE.—A large and magnificent building has been erected in Broad Street, Philadelphia, by Mr. W. R. Warner, of the firm of W. R. Warner & Co., wholesale pharmacists. The first floor, consisting of a spacious hall, has lately been opened to the public as a place of entertainment, and at the opening ceremony there was an influential assemblage to do honour to the generous giver.

A NOVELTY was shown at a recent conversazione of the Cambridge University Natural Science Club. This was a pedigree tree of the coal-tar products. With coal-tar for its trunk, the tree bore as its fruits bottles of gorgeous aniline dyes and crystalline products of extraordinary incongruity; saccharin, antipyrin, and smokeless gunpowder were amongst the things which crowned neighbouring branches.

DISCOVERY OF BRINE AT MIDDLEWICH.—It is reported that a large quantity of brine has been discovered at the shaft which has been recently sunk on Newton Farm, Middlewich. The brine, it is said, has risen in the shaft to a height of over 70 yards, the strength being 2 lbs. 10 ozs. of salt to the gallon. The total depth of the shaft is about 100 yards. The first bed of salt is 60 feet thick, and twelve yards below this a second bed has been discovered, yielding at a depth of 56 feet a very fine quality of amber rock-salt. The discovery has caused some excitement in the salt trade.

POISONED BY A LOTION.—About half-past three o'clock on Monday, March 3, Charles Hobson, aged 50 years, weaver, of Whitestones, Thurstonland, died at his home through drinking a lotion called "Cure All," which he obtained from a chemist, for lumbago. Apparently not noticing that the remedy was for outward application only, the unfortunate man took a dose of it about eight o'clock on the previous Saturday night. He immediately became unwell, suffering from a burning sensation in the throat, and subsequently Mr. Smailes, surgeon, of Honley, was called in, but his efforts were unavailing, and death ensued. The doctor said that the man had suffered from inflammation of the stomach, caused by taking the medicine.

W. B. FORDHAM & SONS (LIMITED).—The fourth annual meeting of Messrs. W. B. Fordham & Sons was held on

February 28. As we have already stated, a dividend has been declared of 10 per cent. Mr. W. B. Fordham (chairman), in moving the adoption of the report, referred to the success that had attended the sale of the "Moukey" brand soap. It had realised their most sanguine expectations. Aspinall's enamel appeared also to be more appreciated every day, and in the course of five and a half months the amount for purchases made reached the sum of 10,000*l.* sterling. The company's turnover for the year 1889 was 137,498*l.* 14*s.* 3*d.*, or nearly 11,000*l.* in excess of that of the previous year, whilst the percentage of working expenses was less, notwithstanding the increased volume of business. It was recommended that 500*l.* should be added to the remuneration of the directors, and this was referred to a meeting to be called immediately. The report was adopted unanimously.

A TRUSS CASE.—On Thursday, in the Westminster County Court, Mary Hammond, a domestic servant, employed at Holland Park, sued Mr. J. A. Sherman, 64 Chancery Lane, for 25*l.* damages for alleged negligence in treatment. In consequence of seeing an advertisement, the plaintiff said, she called on Sherman and consulted him. He said he could cure her, and she paid 1 guinea for an examination. Sherman, who is not a qualified doctor, took off a truss she was wearing and put on his appliance, telling her he would cure her for 20 guineas. She borrowed that amount from her mistress and gave it to defendant. The appliance, instead of curing her, as guaranteed, made her worse. Mr. Boodie, her solicitor, was consulted, and wrote demanding the return of the money and threatening an action if it was not paid, and a day or so after that a gentleman called upon her and handed her 21*l.*, she giving a receipt stating that she took the amount in settlement. The defence was that the receipt was a bar. Mr. Candy submitted there was no case to go to the jury, and his Honour concurred. Judgment for the defendant was entered with costs, not to be taken if no further proceedings are taken.

H. H. WARNER & CO. (LIMITED).—The statutory meeting of this company was held on Monday, under the chairmanship of Mr. T. W. Boord, M.P. In the course of his remarks the chairman referred to the fact that the company had been described by some of the newspapers as a company for the sale of a quack mixture. He disagreed with that opinion. There was a great difference between a quack medicine and a patent medicine. The sale of the former was a fraud upon the public as it was of no medicinal value. A patent medicine, on the other hand, was of value, and therefore there was no fraud constituted by its sale; and, further, it merited and obtained the approval of the public. His reason for classifying Warner's remedies as "patent" was because he was satisfied with the immense number of voluntary testimonials which had been received by Mr. Warner as to their value. Applications for shares had been made to the extent of five times as many as they had for allotment. The applications which they had received from medical men, druggists, and patent-medicine dealers they had felt bound, for obvious reasons, to allot in full as far as possible. An interim dividend was then declared of 15 per cent. on the ordinary shares, and 8 per cent. on the preference shares, which it was stated would be paid within a week.

AN AMERICAN OPIUM SUIT.—In 1888 Messrs. McKesson & Robbins purchased of Messrs. De Valliere & Negroponte 50 cases of opium, for forward shipment. According to the terms of the contract the quality of this opium was to correspond with that of five cases previously purchased in New York from the same firm. In April, 1888, the tender of a first delivery on the 50 cases was made, but rejected by Messrs. McKesson & Robbins on the ground that the quality of the opium was not up to the sample, and, moreover, because the goods came from Paris and not from a usual port of shipment. They therefore claimed that the contract was void. Messrs. De Valliere & Negroponte thereupon sued to recover damages to the amount of \$4,000 for breach of contract. The case has been heard in the United States Circuit Court by Judge Wallace, the trial occupying two days. The plaintiffs held that as no port of shipment was specified in the contract, the defendants claim that shipment from Paris was not a regular shipment was invalid. Both sides submitted copies of analyses made by different chemists to show the quality of the opium, and a number of witnesses were examined to support the respective claims of the litigants.

In the result the jury brought in a verdict for the defendants, but the plaintiffs will ask for a new trial. This is the first time in the history of the house, extending over fifty-seven years, that Messrs. McKesson & Robbins have been involved in an important lawsuit, and they are, therefore, the more pleased with the verdict in this case.—*Oil, Paint, and Drug Reporter.*

CARBOLIC POISONING.—On Thursday of last week Esther Fell, 44, of 42 Joseph Street, Blackburn, was found by her father in an unconscious state in her bedroom. Lately she had been depressed in spirits on account of an increased deafness. When her father returned home from work on Thursday evening he found the door locked, and afterwards made the discovery that she had committed suicide. Doctors were at once sent for, and emetics administered, but the poor woman never regained consciousness. A cup which contained carbolic acid was found near, and it was evident, from the fact that she was burnt about the mouth and chin, that she had taken the contents. An inquest was held the following day, and a verdict of "suicide while temporarily insane" was returned.—An inquest was held at Liverpool, on Saturday last, on the body of John Woods, a blacksmith, fifty-two years of age, who resided at 49 Haliburton Street. For some years past the deceased had been greatly addicted to drink, and gradually gone off his food; and recently he had been very much depressed in spirits. On Thursday morning his wife left the house on some business, first proceeding to the place where her son was employed, and sent him home to keep his father company while she was away. The boy found his father lying on the sofa trying to vomit, and at once procured medical assistance. Dr. Campbell, who was called in, deposed that he found Woods suffering from carbolic-acid poisoning, which was, in his opinion, the cause of death. Mrs. Woods stated that her husband bought the acid for disinfecting purposes, and that it had been in the house for a long time. The jury returned an open verdict.

Trade Notes.

MESSRS. WILLIAM EDWARDS & SON'S new catalogue of British and foreign proprietary medicines, druggists' sundries, and miscellaneous articles has just been issued.

THE QUINADA WATER COMPANY have moved their manufactory back to their original premises (Messrs. Pollock & Co.), 133 Fenchurch Street, E.C., and will in future carry on their business from that address.

MESSRS. TRON & PISTORESI, of Leghorn (Italy), announce that Mr. Ezio Pistoresi has ceased to be a member of the firm. The business will be continued by the remaining partner under the style of Enrico Tron & Co.

MESSRS. A. & M. ZIMMERMAN send us a copy of letters which have passed between them and Professor Charteris, of Glasgow, in regard to synthetically prepared salicylic acid which Schering's, of Berlin, now produce. Professor Charteris states that this acid is in "white acicular prisms," and he has satisfied himself that its "physiological action is similar to that of the acid obtained from natural salicylates, and therefore of such purity as to be equally eligible for medical use."

"SULFONAL CAPSULES (LUNAN)."—One of the chief objections to the use of sulphonal as a hypnotic is its comparatively slow solubility, whereby its action as a hypnotic is so long delayed that it is necessary to take the dose a few hours before sleep is desired. Messrs. James Robertson & Co., of Edinburgh, have addressed themselves to remedying this defect, and their Mr. George Lunan has elaborated a process whereby, it is claimed, the sulphonal is obtained in a state of solution with a comparatively small proportion undissolved. The solution, or paste, is put up in 5, 7½, and 10 grain capsules. These doses are smaller than usual, but it is claimed that the sulphonal in this form is much more active, and begins to exert its physiological influences in half an hour. These are advantages which, it is obvious, extend the usefulness of the drug, and it would be of interest on that account to introduce the capsules to medical men for trial.

Pharmaceutical Society of Great Britain

EVENING MEETING.

MR. JOHN ROBBINS, the treasurer of the Society, presided at the meeting held on Wednesday evening. There was a better attendance than usual, and the bill of fare was more varied. The curator was first called upon to describe

THE SPECIMENS ON THE TABLE.

A sample of white Mogadore gum was first referred to. This is in opaque tears, which differ in appearance from the transparent tears seen lately. It makes an excellent mucilage with twice its weight of water. It cannot be distinguished from genuine Kordofan gum, and Mr. Holmes agreed with the suggestion of a member of our staff, that it is really Kordofan gum which finds its way to the market by a new route. A sample of cinnamon-leaf oil was sent from the Seychelles by Mr. J. J. Sharp, the distiller. The cinnamon plant yields three distinct essential oils—the leaves one containing eugenol, the bark one in which cinnamic aldehyde is the chief component, and the root one containing camphor. A couple of pieces of Canadian asbestos rock were shown, also a sample of opium adulterated with lead. Regarding this, Mr. Powell, the donor, explained that the adulteration was detected in his pharmacy in the course of making laudanum. The lead appeared to be in raspings, and was placed immediately under the leaf envelope. Half an ounce to the pound was about the proportion present. The wholesale supplier stated that the adulteration with lead had disappeared for a long time, but had lately been renewed.

OIL OF BETEL-LEAF

was the next subject, and was introduced in a paper by Mr. D. S. Kemp, late of Bombay. Mr. Kemp explained the use of betel-leaf as a masticatory along with areca-nut, gambier, and lime, and in a few interesting sentences described the universal custom in India of using this combination as a means of warding off fatigue as well as in social functions. In 1835 he had submitted about a hundredweight of the fresh leaf to distillation, and obtained 3 oz. of volatile oil. He noticed that as the distillate came over there was a light oil which floated on the surface of the water, and also one which sank. The latter had a sp. gr. of 1.039. Since then Mr. Prebble, of Kemp & Co. (Limited), Bombay, had distilled some fresh leaves. In the winter months 90 lbs. of fresh leaves gave him 1½ oz. of a pale green oil, which had a sp. gr. of 0.904. No heavy oil was obtained on this occasion, whereas on another occasion, in the summer months, the heavy oil was again obtained. These results throw some light upon the contradictory results obtained by Eykman and by Bertram and Gildemeister. The former began to work on this oil in 1835, the leaves used being from plants grown in Buitenzorg (Java). The oil obtained had a sp. gr. of 0.953, possessed the odour of the leaves, and became brown on exposure to the air. He found it to consist of three constituents, citrene-terpene, a sesqui-terpene, and para-allyl-phenol, or chavicol, the last-named being the active constituent. Bertram and Gildemeister distilled their oil from dried leaves. It had a sp. gr. of 1.024, and they allege that its active constituent is betel-phenol, a substance isomeric with phenol (THE CHEMIST AND DRUGGIST, February 1, page 154). Previously they had said that this was really eugenol, and they also put down sesqui-terpene and cubebins as amongst the constituents. Eykman has since gone over his work again, and persists in the identity of chavicol, also that the lighter portions of the oil are cymol, cineol, and, amongst other things, menthol. He thinks that the other authorities have been working with an oil entirely different from his, probably it was not betel-oil at all. Mr. Kemp's results throw some light upon that. Apparently, the leaves do not always yield the same product. It was pointed out that chavicol is an active antiseptic, five times stronger than carbolic acid.

In the discussion which followed Mr. UMNEY referred to the interesting character of the paper, especially in regard to the variation in the product at different seasons. It was not usual, he said, to find a drug yielding a light oil at one

season and a heavy one at another. Mr. MACEWAN said he had placed a sample of betel-leaf oil upon the table, which he had obtained from Samarang (Java) in 1887. He referred to the causes which led to the introduction of the oil (see THE CHEMIST AND DRUGGIST, xxii., page 807), and said that his specimen had a sp. gr. of 0.943. It was remarkable for the fact that it possessed an odour somewhat like ethyl ether, and Mr. Kemp had suggested that this might be due to its having been removed from the distillate water with ether. There might be another explanation. One of the constituents of the oil, according to Eykman, was citrene-terpene, and the decomposition of that might give rise to an odour analogous to that evolved from decomposing lemons. Mr. JOHN MOSS said that betel oil was a market article, although it was little asked for, and he was glad that it was attracting attention. He suggested that the leaves should be examined for an alkaloid, seeing that they possessed virtues similar to tea and coca. He was not surprised at the different results which had been obtained on distilling the leaves at different seasons. They well knew that the same plant grown in different parts of the world gave very different yields of product. Professor ATTFIELD was much interested in the paper, which, in his opinion, was a valuable one. It was a strong illustration of the statement which he had frequently made, that it was useless to try to find physical and chemical constants in essential oils. They were mixtures which varied according to circumstances, and it was almost impossible to reproduce these circumstances at distinct operations. Mr. HOLMES commented on the virtues of chavicol as an antiseptic, and pointed out that the leaves of allied plants, such as cubeb, do not contain an alkaloid.

Mr. KEMP then replied, and received the thanks of the meeting.

RESIN SOAP AS AN EMULSIFYING AGENT.

This was the title of the next paper, contributed by Mr. H. Collier, of Guy's Hospital, which was a thoroughly practical one. The soap is made by boiling 180 grains of common yellow resin and 300 grains of caustic soda in a pint of water for two hours, at the end of which time it is reduced to a yellow pasty mass, which is to be heated to dryness and powdered. The product resembles powdered resin very closely, but dissolves readily in water with the aid of a little heat. The solution is saponaceous, but never gelatinises. The soap dissolves freely in rectified spirit also. If mercury is shaken with the aqueous solution (20 grains to 1 oz.) the metal is broken up into minute globules, which do not run together again, as each globule is coated with the soap. Chloroform is transformed into a creamy liquid. In both cases the soap acts much better than tincture of quillaia; it gives more viscosity than the latter. Working on the B.P.C. formulae gives, an excellent *liquor carbonis* is obtained by dissolving 2 oz. of the soap in a pint of S.V.R. by heat, adding 4 oz. of purified coal-tar, heating to 120° F., setting aside for two days, and decanting or filtering. Mr. Collier showed how perfectly this mixes with water; also how *pix liquida*, Peru balsam, and oil of cade are similarly emulsified. The soap gives splendid results with cod-liver, almond, olive, and castor oils. The plan is to dissolve 10 grains of the soap in 1 oz. of water, and shake up with 1 oz. of the oil. Castor oil is less easily emulsified than the others, but they do perfectly with 5 grains of the soap. Essential oils are also very readily emulsified. There is an opening in this direction for making inhalation emulsions, the soap taking the place of the magnesia of the T.H.P. formulae. Thus 10 grains of the soap, 3ij. of the volatile oil, and water to 3iij., make an emulsion which mixes very well with water. Creosote requires 20 grains of the soap. Five grains added to a drachm of spirit of camphor makes a preparation which mixes perfectly with water—the camphor not separating. So also 20 grains with 1 oz. of tincture of tolu. Thymol gr. xvij., resin soap gr. xx, spirit 3iij., is a good formula for a preparation which may be diluted, and for such oils as santal and copaiba we get good emulsions with a drachm of the oil, 10 grains of the soap, and 2 oz. of water.

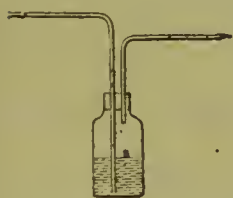
Mr. KEMP said that Jeyes' creolin contains resin soap, but Hartmann's does not. The former makes the better emulsion. Mr. GERRARD corroborated this statement. He said

he had lately found that Jeyes' preparation owes its miscibility with water to the resin soap which it contains. This soap, he thought, is a most remarkable emulsifying agent. It gave excellent results with carbolic acid, and, from observations, he was inclined to believe that Jeyes' creolin is prepared from mixtures, probably the by-products obtained in making carbolic acid, for ordinary coal-tar gives much darker solutions. The soap seemed to have its most useful application in the emulsification of essential oils for inhalations, and he could corroborate all that Mr. Collier had said.

Mr. LLOYD WILLIAMS asked if the soap contains free alkali, and, if so, is this not objectionable in the case of essential oils? Mr. HELBING said that some attention had been paid to resin soap on the Continent a few years ago. It was made from resin and sodium carbonate, and was recommended for blennorrhœa in 7, 15, and 30 grain doses. Since then attention had again been called to it, owing to the fact that it was alleged to be a constituent of Jeyes' creolin. Many people had attempted to analyse that preparation; and he was able to say, in reply to Mr. Gerrard, that the characteristic which he had mentioned was a proof that it was prepared from the higher homologues of phenols, which were most easily emulsified and were non-poisonous. Professor ATTFIELD asked if ordinary yellow soap, which contains resin soap, had been tried; also other soaps. The CHAIRMAN objected to the taste, and mentioned that tincture of myrrh is an excellent thing for emulsifying camphor. Mr. COLLIER, in his reply, stated that the soap contains only 0.02 per cent. of free alkali. He thought Mr. Helbing's remarks were very valuable, as proving the innocuous nature of the soap; it is in this respect also superior to quillaia, for that is a heart poison. The taste of the soap is easily covered—in the B.P.C. cod-liver oil emulsion it is not noticeable. Common soap has the objection that its solutions quickly gelatinise.

DR. J. C. THRESH

then gave a demonstration and brief explanation of his method for the estimation of ethyl nitrite in spirit of nitrous ether. Dr. Thresh said that he had for long been impressed with the idea that the methods now in use were not simple enough for retail chemists and students, and the one which he now introduced required neither special apparatus nor special reagents. A wide-mouthed 1-lb. bottle is taken, and fitted with a double perforated indiarubber stopper. It is three-



fourths filled with water, 2 grammes of potassium iodide, and 10 c.c. dilute sulphuric acid with a little starch mucilage put into it. Then the stopper is put in, with the left-hand tube dipping a few inches below the surface of the water, and the other as in the sketch. To get rid of the oxygen in the water and in the air-space the left-

hand tube is attached by means of a piece of rubber tubing to a coal-gas tap, and the gas passed through for ten minutes. It may be ignited as it comes away from the bottle. By this time the oxygen is driven out of the bottle, and now 5 c.c. of the spirit of nitre is taken up with a long pipette, the right-hand tube removed, and the pipette introduced as quickly as possible. If it be allowed to rest on the bottom of the bottle and the gas turned on, it soon flows out. Iodine is at once set free. A small tube attached to the outlet of a burette is now put in the place of the pipette, and hyposulphite solution is run in until the blue colour disappears. For the minimum Pharmacopœial strength there is still enough reagents in the bottle for a second estimation. Each c.c. of the B.P. hyposulphite solution is equal to 0.0075 gramme ethyl nitrite, so that $0.0075 \times \text{number of c.c. hyposulphite used} \times 20 = \text{per cent. of ethyl nitrite}$, and 0.4 per cent. is equal to one volume of nitrous oxide gas. Dr. Thresh showed that the process gives results nearer the truth than Allen's. The following is the average of six tests:—

Theory	Thresh	Allen
2.265 per cent.	2.21 per cent.	2.12 per cent.

The amount of oxygen in coal-gas is so trifling that it does not vitiate the results.

Mr. UMNEY opened the discussion by congratulating the author on the simplicity of his method, and said that, although Allen's method was in daily use in his laboratory,

he would in future employ this one. Professor ATTFIELD was also charmed with the process, briefly referred to other methods, and, as reporter to the British Pharmacopœia, felt rejoiced that pharmacists had now several good methods of assay to choose from, whereas a few years ago there was none. Mr. FUGE, his assistant, said he had tried the process, and thoroughly confirmed Dr. Thresh's statement that the results were accurate and easily obtained. The difference between individual estimations was not more than 0.01 to 0.02. Mr. SIMONS, a student of Professor Attfield's, also confirmed. Dunstan and Dymond's process was not so simple: the flask sometimes burst, one could not always get the whole of the spirit of nitre into the flask, and some of the hyposulphite solution could not be returned. Mr. LLOYD WILLIAMS said that, while closer results could be obtained by Dunstan and Dymond's process, there was the glorious uncertainty about the flask, and Dr. Thresh's method was simpler. Dr. THRESH briefly replied.

MORE ABOUT SWEET NITRE

was contributed by Mr. T. S. Dymond, in "A Review of Recent Work on Spirit of Nitrous Ether." This proved to be a criticism of Dr. Squibb's paper on the subject, which was fully referred to in our issue of August 31, 1889. Mr. Dymond first spoke of Dr. Squibb's conclusions regarding the relative merits of the B.P., U.S.P., and his own methods of preparing the spirit, and gave it as his opinion that the results were valueless, because the relative proportions of the ingredients are not the same. The next point had reference to the nature of the gas which is evolved when the spirit is mixed with water. This gas, Mr. Dymond says, is ethyl nitrite and air. At this point he began to criticise Dr. Thresh's paper. He claimed that the new process was substantially the one which Professor Dunstan and he had devised, and disagreed with Dr. Thresh's statement that that process is not suitable for pharmacists and students. It was as simple as Dr. Thresh's, he said, and more accurate, for coal-gas did contain oxygen, and by passing some gas into a flask containing nitrous oxide and hydriodic acid, he showed that iodine is liberated. Dr. Thresh remarked here that the amount was perfectly trivial, as Mr. Dymond would find if he estimated it. This Mr. Dymond admitted, and proceeded to criticise Dr. Squibb's method for taking the specific gravity of ethyl nitrite. His remarks on the difference between the therapeutic properties of solution of ethyl nitrite and spirit of nitrous ether were also touched upon, and the paper was concluded by an able defence of the solution, and a strong appeal to pharmacists to push it, and to the Pharmacopœia authorities to introduce it as an alternative official preparation.

Professor ATTFIELD, on behalf of Dr. Thresh, who had been compelled to leave, said that he did not pretend that his process was quite as correct as Dunstan and Dymond's, but the difference was so extremely slight as to be of no practical importance to pharmacists who were called upon to supply spirit within certain wide limits officially allowed. At any rate the figures in his case were within 2 in 100 of absolute accuracy, and those in Dunstan and Dymond's method were within 1 in 100. Professor DUNSTAN said that the two processes had been brought into contrast, but that had never been his intention in making his process public two years ago. It was intended to be employed in the investigation of a series of alcoholic nitrites. Personally, he thought that Dr. Thresh's process was convenient and most ingenious. He proceeded to speak of the necessity of pharmacists doing something to introduce to the notice of medical men the solution of pure ethyl nitrite. It was most important that medicinal bodies of known composition should be used, and, although the General Medical Council was a conservative body, he hoped, for the advantage of therapeutics, that the solution would be taken up. Professor ATTFIELD said, in regard to this, that there was now a reasonable proposal before them—namely, that solution of ethyl nitrite should be introduced into the Pharmacopœia as an alternative preparation. There was a good deal to be said in favour of the proposal, but he would point out that Professor Leech had found no important physiological or therapeutical difference between the old spirit and the new solution. (Professor Dunstan here remarked, "Therapeutic only.") Professor ATTFIELD said many medical practitioners deduced from that statement that

the old spirit was good enough for them, so it was undesirable to rush the new solution. Still he hoped the manufacturers would take it up as a well-known firm in the Midlands had done, and that pharmacists would bring it before medical men, and report the results to the journals of pharmacy. Mr. C. B. ALLEN had something to say in response to this. He had introduced the solution to one or two medical men, who had given it considerable trial, and their report was very unfavourable. They said that the solution was in no sense as good as spirit of nitre, and dropped its use entirely. The spirit of nitre contained a something which made it better than a solution of pure ethyl nitrite. Mr. UMNEY said this was the whole question, and he hoped such trials would be made as would definitely settle the matter. He could assure Mr. Dymond that he was not alarmed when they started to make 100 lbs. of the spirit in his laboratory, and if proper precautions were taken, and a certain amount of "nous" used, there was no difficulty whatever in controlling the reaction so that the distillate came away regularly, and with a little spirit in the receiver they obtained a product which generally contained 31 per cent. of nitrous ether. A gentleman in the audience spoke about the good qualities of the spirit of nitre, and said that some old practitioners that he knew persisted in maintaining the value of the spirit, which he thought must be due, to some extent, to the amount of alcohol in it, especially when it was taken by total abstinents, a remark which produced a roar of laughter. The CHAIRMAN also said that they could not get rid of the fact that some old people had a very large amount of faith in the old spirit. Mr. DYMOND then replied to Dr. Thresh's remarks, and again referred to the therapeutic effects of the solution of ethyl nitrite being definite. He said that it had now been about two years before the trade, and deserved to be taken up more generally. Mr. MacEwan asked if he could give a rational method for dispensing this solution, and to this he replied that it could be done in the same way as spirit of nitre, for the amount of alcohol in the solution would tend to delay the decomposition somewhat. Mr. MacEwan suggested that the decomposition would go on nevertheless, and asked if there was not some better way by which the definite nature of the solution could be retained. Mr. Dymond replied that it could be dispensed in small bottles and be ordered to be given in drops. This concluded the proceedings.

Pharmaceutical Society of Ireland.

THE monthly meeting of the Council was held on the 5th instant, the President, Mr. Charles Evans, in the chair. Also present: the Vice-President, Mr. Wells; Professor Tichborne, Dr. Burnes, and Messrs. Beggs, Merrin, McCormack, Hayes, Hodgson (Treasurer), and Simpson.

PROSPECTS OF LEGISLATION.

The Registrar (Mr. Ferrall) read the following letter from the Attorney-General for Ireland, Mr. Madden, M.P. :—

February 10, 1890.

Sir,—Your letter of the 6th was forwarded to me here. Having left Dublin, I regret that it will not be in my power to receive a deputation from your Society. Should a Bill dealing with the subject to which you refer be introduced during the present session by any member, I shall be glad of any information which your Society may consider of importance.

Faithfully yours,

A. T. Ferrall, Esq.

D. H. MADDEN.

PRESIDENT: That does not look like as if it were his intention to introduce a Bill at present.

Mr. HODGSON: I suppose it is known that the Belfast gentlemen are taking active steps in reference to a Bill?

VICE-PRESIDENT: They are making incorrect statements to the Attorney-General. One of them is that Mr. Hodgson resigned his connection with this Society. Another assertion in the memorial which the chemists and druggists have sent to the Attorney-General is that we are becoming bankrupt, and must soon collapse unless we get help from some source.

Professor TICHBORNE read from THE CHEMIST AND

DRUGGIST the statement contained in the memorial alluded to, which was as follows:—"At the last moment a section of the Council of the Pharmaceutical Society repudiated the compromise come to, and intimated its intention of opposing the Bill, the result being that the President, Vice-President, Honorary Treasurer and most influential members of the Council resigned."

Mr. HAYES: Well, that's the truth. I think Mr. Hodgson did resign.

Mr. HODGSON: Oh, yes.

Mr. HAYES: But he was asked to reconsider his resignation, and did so.

PRESIDENT: The statement does not convey that impression.

VICE-PRESIDENT: The idea conveyed is, that he went away from the Council.

Professor TICHBORNE: There had been some resignations previously, in consequence of offence taken at some observations made here.

VICE-PRESIDENT: Mr. Hodgson resigned, but afterwards withdrew his resignation. Mr. Allen resigned, but his resignation had nothing to do with the Bill. He had been ordered by his doctors to do so on account of his health.

Mr. HODGSON: Since that little difficulty there has been a re-election of your officers, and I was one of those who were re-elected.

Professor TICHBORNE: I suppose our financial position is very good?

Mr. HODGSON: It is improved.

Professor TICHBORNE: Our income has increased, in spite of the striking off of names.

Mr. HODGSON: These gentlemen, headed by Sir James Haslett, had a meeting in Dublin last week.

VICE-PRESIDENT: And the same journal said of them that they made a great deal of talk and had a great many reunions and dinner parties, but that there was very little to show for it.

Mr. HAYES: Supposing that the chemists and druggists do not bring in any Bill, but continue selling poisons, and in many cases compounding, are we to allow that?

VICE-PRESIDENT: I agree with a great deal of what is being said in the north of Ireland. I believe that we have not been carrying out the Act of Parliament that we have got, and that by carrying it out we could stop these things.

Mr. SIMPSON: Where are we to get the funds to do so?

VICE-PRESIDENT: Where did we get the 150*l.* to spend last year on a Bill that was not worth anything to us? If you prosecute in a few good cases, you will soon stop the others.

Professor TICHBORNE said his reading of the Attorney-General's letter was, that he did not want to be bothered about the subject at present.

Mr. HODGSON: I think it a courteous letter, and that we ought to acknowledge it, and say that we are not at present propounding any Bill, but that there are defects in our existing Act which we are very desirous to have remedied. That will show that we are not connected with those gentlemen who are urging their point with the Government, and doing it continuously.

Professor TICHBORNE: I think we ought to discuss this matter in committee. We have done so heretofore.

Mr. BEGGS: I second that proposal.

Mr. HODGSON: Why not let them know what our views are? We have no secrets.

Professor TICHBORNE: My view is, that we should be prepared with a Bill, showing how far we are prepared to go, even though we should not place it before the Attorney-General.

Mr. HODGSON: You have already acceded to a Bill.

Professor TICHBORNE: No, this Council has not.

Mr. HAYES: We promoted a Bill, and gave way on a great many points.

Professor TICHBORNE: That very Bill was one of the causes of quarrel. The late president resigned on a point in it that you would not accept. That Bill had become quite a travesty of the original Bill promoted by the Council.

Mr. HAYES: There were only one or two clauses that we differed on.

VICE-PRESIDENT: I do not think that if it had gone back to the House of Lords they would have recognised it as the same Bill at all.

Mr. HAYES: I do not think there is any necessity for going into this now.

Mr. HODGSON: The Government have no intention of promoting a Bill now; and I maintain that no Bill propounded by the chemists and druggists will be considered by the Government unless it is endorsed by the Pharmaceutical Society. We are a recognised body, who have been working under an Act of Parliament for years; and I do not think that any alterations proposed to be made in it by any outside body would be accepted without consulting us.

Mr. MCCORMACK: What the Attorney General wants to know is—whether, in the event of anyone bringing in a Bill, we will give him every information in our power.

It was then ordered that the Registrar should write to the Attorney-General expressing the thanks of the Council for his letter, and stating that they are not taking any steps to promote a Bill at present, but that should they do so they would certainly lay their views before him for his advice and counsel.

IS THE SCHOOL ILLEGAL?

A letter was read from Mr. William N. Allen, M.P.S.I., enclosing a copy of a letter which he had forwarded to Sir William Kaye, Q.C., Clerk to the Privy Council of Ireland, pointing out that the establishment by the society of a school of chemistry was at present illegal, because the sanction of the Privy Council to the resolution in favour of it had not been obtained.

The VICE-PRESIDENT observed that Mr. Allen stated in his letter that he had communicated with the Registrar on this matter. The Registrar said Mr. Allen made the statement quoted verbally when he called to pay his subscription; and that he (the Registrar) reported this to the Vice-President (the President being absent at the time), but without mentioning Mr. Allen's name. Professor Tiebborne and Mr. Hodgson expressed the opinion that this mention of the subject to the Registrar could not be regarded as a communication to the Council, and the Vice-President thought they should also tell Mr. Allen that they thought an old member of the Council should have treated them with more courtesy.

PUBLIC APPOINTMENTS.

A letter was read from Mr. T. R. Connolly, Dundalk, stating that on the preceding Monday an election was held for the office of apothecary in the Louth Infirmary. The writer and two other licentiates of the Society presented themselves as candidates, but were declared ineligible; and a licentiate of the Apothecaries' Hall was elected. He asked that the Pharmacy Act should be amended so as to render licentiates of the Society eligible for such positions. Four years ago he brought a similar case under the notice of the Council, and the then President, Mr. Brunner, endeavoured to have the matter set right, but failed. In reply to the Vice-President, the REGISTRAR said the writer claimed eligibility under clause 34, which says that licentiates of the Society are eligible to be appointed apothecaries to district lunatic asylums, public gaols, and prisons, in Ireland, but that they are not to prescribe.

Professor TIEBBORNE: Sometimes in hospitals the resident apothecary is supposed to act as a medical man.

Mr. HODGSON: Wherever an apothecary is allowed to hold a situation in a public institution, we ought to make a fight that our licentiates shall be placed on an equal footing. It is our duty to our licentiates to do so.

It was ordered that inquiry should be made into the case, and in particular as to the duties of the apothecary to the infirmary.

THE PRELIMINARY EXAMINATION.

A letter was read from the General Medical Council requesting information respecting the Preliminary examinations which had been held by the Society during the past year.

The PRESIDENT: The highest percentage obtained by any candidate was 72, and the lowest of those who passed 44; thirty-one candidates passed and twenty-eight were rejected. The calendar containing the examination-papers will be forwarded.

An order was made that the information required by the General Medical Council should be forwarded in detail.

MISCELLANEOUS.

Mr. Eugene MacSweeney wrote requesting the Council to accept from him a certificate of having attended the prescribed course of practical chemistry at the City School of Chemistry and Pharmacy, London. It was ordered that inquiries should be made in reference to the application. A report from the Law Committee was adopted. Mr. James Hartford, of 3 Cedar Street, New York, was elected a member of the Society, and some payments were ordered.

THE LONDON CHAMBER OF COMMERCE.

ANNUAL MEETING OF THE CHEMICAL TRADES SECTION.

THE annual meeting of this section was held at Botolph House, E.C., on Wednesday, March 12, Mr. Thomas Tyrer (President) in the chair. The following members were present:—Messrs. A. B. Hill, Thomas Christy, John Moss, J. Elborough, Shaw, C. F. Macadam, David Howard, George Bull Francis, Boverton Redwood, Bertram Blount, E. J. Jones, O. Murray, C. Umney, and W. H. Francis.

The Secretary having read the minutes of the last meeting, and the election of the committee and officers for the year 1890-1, and other matters of business having been gone through, the chairman called upon Mr. Chas. Umney to make a statement in reference to the proposed

REVISION OF RAILWAY RATES.

Mr. UMNEY narrated concisely the work done by the sub-committee appointed to watch the interest of the drug and chemical trade, and also referred to the examination of Mr. David Howard before the commission. Mr. Howard's evidence was reported at length in THE CHEMIST AND DRUGGIST of February 23. In the course of his remarks he stated that after the objections of the section were lodged, in the autumn of last year, two slight modifications in the proposed classification were made by the railway companies, viz, lime-juice in casks was put from class 3, in which it had been placed, to class 2, and liquid ammonia was also more favourably classified, viz., from class 5 to class 4. These trivial alterations were not encouraging, and a conference took place in December between the railway managers and a deputation of this section of the London Chamber (Messrs. David Howard, J. Evans (Liverpool), F. H. Lescher, W. H. Francis, and Chas. Umney), when the classification of "smalls" and empties was fully discussed. The case for the drug and chemical trade was ably stated by Mr. Howard, and, as far as one could judge, favourably received by the railway managers. Upon the question of "smalls" they were most anxious to know what would satisfy the trade. Mr. Umney suggested that they could not do better than adhere to the system now in use, and which had, in his opinion, worked excellently for the last twenty years, viz., to charge a small and increasing percentage as the weight of the package became less, this percentage to be increased on freights of low value, and decreased on those of higher value. Taking as a standard a freight of 40s. per ton, and the highest weight of package to be classified as a "small" at 500 lbs., the sliding scale should be as follows:—On 4 cwt., an advance of 6 per cent.; on 3 cwt., of 8 per cent.; on 2 cwt., of 12 per cent.; on 1 cwt., of 25 per cent.; and on $\frac{1}{2}$ cwt., of 50 per cent.—these percentages being in strict accord with the present Railway Clearing-house book.

Shortly after this meeting the companies changed their front, and in December last issued a proposition in reference to "smalls," adopting the following graduated scale of charges:—A parcel not exceeding 28 lbs. to be charged as 1 cwt., from 28 to 55 lbs. as $1\frac{1}{2}$, from 56 lbs. to 1 cwt. as 2 cwt., from 1 to 2 cwt. as 3 cwt., from 2 to 3 cwt. as 4 cwt., from 3 to 4 cwt. as $4\frac{1}{2}$ cwt., and above 4 cwt. as 5 cwt. This, of course, was a small concession, because in their original scheme it was proposed that all smalls under 560 lbs. should be charged in the highest class, and double extra tonnage rates; but the companies' proposal to treat all freights, whether 10s. a ton or 50s. a ton, to an equal percentage of advance was obviously unfair.

While it must be acknowledged that this new scheme would give some relief in comparison to the original to

traders whose consignments averaged from 3 to 5 cwt., still it would press as hardly, or even more heavily, upon druggists, 80 per cent. at least of whose consignments were under 2 cwt.

The committee therefore determined to oppose this new departure, not only because it represented an enormous advance in the charges, but because, in their opinion, if the sliding-scale charge which is now in use, and to which allusion had been made, is not to be adopted, then the weight of "smalls" must not be more than half the weight proposed by the railway companies—say, 2½ cwt. instead of 5 cwt., or, perhaps, better still (in order to make our "smalls" weights in accord with those adopted years since by Scotch railways), 2 cwt.

Mr. Umney then distributed to the meeting an elaborate chart, prepared by himself and his fellow-members, of the Railway Rates Committee. The chart contained in a tabulated form a table, calculated from the Railway Clearing-house book, showing the percentage rate charged on "smalls" above the ordinary tonnage rate under the old system, the continuance of which the committee declares to be preferable to the adoption of the companies' December proposition alluded to above. The table shows that the charge for "smalls" varies, according to the weekly consignment and the tonnage rate, from 105% to 265%, against 100% of ordinary freight. Then follows the December proposal of the companies, of which the salient features have been already given, and finally a long table of examples showing the difference in the present and the proposed charges. According to this table, where the present charges for "smalls" weighing 1 qr. is from 6d. to 1s. 3d., according to tonnage rates, under the new proposition the maximum rates might range from 9d. to 2s. 6d. For consignments up to 1 qr. 14 lbs. the respective figures are 7d. to 1s. 6d., against 9d. to 3s. 9d.; for 3 qrs., 9d. to 2s. 4d., against 1s. to 5s., and so on, though the difference on a consignment weighing 4 cwt. 1 qr. 22 lbs. would only be very slight, the charge now in force being from 2s. 3d. to 11s. 2d., and that proposed from 2s. 6d. to 12s. 6d. The illustrative chart was well calculated to impress upon its recipients the sweeping character of the companies' latest proposals. In conclusion the speaker observed that he could say much more on this matter of "smalls" were he not of opinion that it is not only unnecessary, but that the companies will again retreat from the amended position they took up in December, for Sir Henry James recently intimated to the tribunal that the matter of "smalls" would be again considered by the English companies.

Mr. Umney finally added that he might also have spoken at length upon the question of "empties," but an hour's talk would not be half as convincing as a five-minutes' perusal of an excellent table published by the wholesale chemical dealers, who are approaching the matter through the Lancashire and Cheshire committee. Copies of that table were also handed round to the meeting.

FUTURE WORK FOR THE SECTION.

Mr. THOMAS TYRER proposed a vote of thanks to Messrs. Howard, Umney, and Francis for their efforts in connection with the railway rates revision, in the course of which he observed that the main work of the year had been the railway rates question. During the year the executive had met twenty times, and the Chemical Committee fourteen times. During the past year the committee had given its approval to the proceedings of the council in its efforts to be a medium of conciliation between employers and their workmen. Conciliation, rather than any other kind of action, was the way of preventing a disastrous waste of energy and temper. It was gratifying to the Chamber that the labours of the committee especially appointed for the purpose had met with good results. During the year, also, they had dealt with matters relating to fraudulent bills of lading and the insurance on petroleum, but perhaps the question they would have to take most interest in in the immediate future was with regard to the working of the Merchandise Marks Act. He believed Mr. Howard held the opinion that it was an advantageous Act for the chemical trade; but, with regard to that special section, he thought that recent experiences would not tend to confirm that opinion. If the statements of merchants were correct, there was a considerable amount of hardship under the Act. When they saw the enormous

strides of the chemical industry in Germany, and looked at the statistics showing the amount of the imports into our own colonies of products which used to be made in this country, or at any rate were sent from this country, and now came direct from abroad, they could only come to one conclusion. Until recently it was a fact that freights were actually cheaper from some of the German ports than they were from London. They would have to consider whether before the proposed inquiry by a select committee, of which Mr. Howard Vincent had given notice to the House of Commons, they should not be represented. It was said that the colonies must adopt a similar form of protection to that they had; but it was impossible to compel the colonies to adopt the same policy in this matter as the mother country. Whilst on the subject, he would refer to a leading article which appeared in the *Chamber of Commerce Journal* of March 5, in which the whole argument turned upon the question of the injury to the trader or merchant as such, and a statement was made that 50 per cent. of the general trade transacted by merchants in this country was in foreign goods, and that that 50 per cent. was even under the mark rather than over it. The article went on to say that that large volume of trade deserved support, and it was the duty of the legislature to encourage and retain it. They were face to face with as interesting and important a problem in trade relations as could possibly be put before any trade association, or before Parliament itself. He thought they should make it a subject of serious consideration, with as full examination of the facts as could be ascertained.

Mr. DAVID HOWARD, in reference to the article mentioned, said that the Chamber as a body was not responsible for it, and he deeply deplored and regretted its publication without the council's leave. He also repudiated all responsibility for its tenour.

Mr. TYRER, referring to the patent laws, said that was also a subject which required their consideration. He reminded them that it was possible for inventions and discoveries by foreigners to be patented in this country simply for the purpose of preventing the articles patented from ever being made in this country.

Mr. HOWARD then proposed, and Mr. UMNEY seconded, a motion that Mr. Tyrer be re-elected President for the ensuing year. This having been unanimously agreed to,

Mr. TYRER proposed, and Mr. THOMAS CHRISTY seconded, that Mr. Wightman be elected to take the vice-chair in place of Mr. Blagden, retired. This was also agreed to, and the proceedings terminated in the usual manner.

MARRIAGE.

[Notices of Marriages and Deaths are inserted free if sent with proper authentication.]

KEMP—COUTTS.—At Rosehill Villa, Hiltou, Woodside, on March 7, by the Rev. J. Duncan, C.C., James Kemp, chemist and druggist (house steward Royal Asylum), Aberdeen, to Agnes Coutts.

DEATHS.

BROOKE.—On March 11, at 5 Walcot Street, Bath, Mr. C. Brooke, chemist and druggist.

BURDEN.—On March 11, at 37 Duke Street, Grosvenor Square, after a painful illness, Elizabeth, wife of Edward M. Burden, pharmaceutical chemist.

COUTTS.—On February 26, at Pathhead, Kirkcaldy, Mr. Alex. Coutts, chemist and druggist. Aged 53. Mr. Coutts carried on his business in Mid Street, Pathhead, and was much respected and esteemed by his fellow-townsmen for his kindly manner and the interest he took in local progressive questions. He was associated as correspondent with the local press, and general regret is felt at his sudden death, which was occasioned by paralysis. He has a son in the business.

ISALSEON is the name of a new oil produced in America by the distillation of oleic acid with quicklime. It is colourless, odourless, and does not become rancid.

Legal Reports.

THE UNQUALIFIED SELLER.

At the Birmingham County Court on Tuesday, before His Honour Judge Chalmers, an action was brought by the Pharmaceutical Society of Great Britain against Thomas Onion, of 135 Gooch Street, Birmingham, to recover two penalties of 5*l.* each, for selling poisons without being duly qualified. Mr. Granger, barrister (instructed by Messrs. Flux & Co. of London), appeared for the plaintiffs, and Mr. Hugo Young (instructed by Mr. Chinn, Birmingham), for the defendant.

Mr. Granger said the action was brought under 31 & 32 Vict., cap. 121. He relied on section 15 of that Act, which provided that persons who sold or dispensed poisons to the public should be duly qualified under a penalty. There had already been a case in the High Court upon the meaning of the words in the section, and judgment had not yet been delivered.

His Honour said he would reserve his judgment in this case until the High Court judgment had been delivered.

Mr. Granger said that practically the only question was whether the defendant was the man who sold the articles. His friend did not deny that what was sold were poisons within the schedule.

Harry Moon, clerk in the employ of the plaintiffs, said that on August 22 last he went to 135 Gooch Street. It was a chemist and druggist's shop, and the name outside was Onion & Co., Limited. He went in, and saw the defendant Thomas Onion, to whom he handed a prescription and asked him to make it up. The prescription was a belladonna liniment. Defendant handed the prescription to an assistant, and ordered him to enter it and make it up. Whilst that was being done witness asked defendant for 2*l.* worth of laudanum. Defendant got the bottle, took it to the assistant, and told him to supply the laudanum when he had finished the prescription. When the assistant had tied up the bottles, defendant handed them to witness and took the money in payment. On November 11 last he went again to the shop, and was supplied with belladonna liniment, the defendant again directing the assistant to make it up.

The Judge: Is Mr. Onion a registered chemist?

Mr. Granger: No.

Mr. Young: The business is carried on by a limited company. One of the directors is qualified. The question is whether this was served by the assistant within the meaning of the Act, or served by Mr. Onion. If served by the assistant, the penalty must be recovered from him, not from Mr. Onion. Mr. Young then cross-examined Mr. Moon, who said that he was a sort of spy for the Pharmaceutical Society. He did not give the defendant any name, but the name of Jenkins was on the prescription. On both occasions defendant took the money.

Mr. Granger put in the list of qualified chemists, and this closed the plaintiffs' case.

Mr. Young, in opening the defendant's case, said there were two people who must be looked to in a case of this sort—the proprietor of the shop and the actual dispenser of the medicine. It had been held that a company was not liable under this Act because the company was not a person. Referring to the report of the case now before the Divisional Court in *THE CHEMIST AND DRUGGIST*, Mr. Young said he thought they might assume that the person who actually dispensed the medicine would be held liable although he was acting on behalf of his master, the owner of the shop. But what the plaintiffs were trying to do here was to hit neither the proprietor of the business nor the actual dispenser, but the middleman, namely, the manager of the shop, whose part in the transaction was no more than that of a cashier or foreman at a general store.

The Judge: Do you say the actual dispenser was a qualified person?

Mr. Young: No, sir; and there is not the slightest doubt he is liable.

The Judge: There is no qualified person in the place?

Mr. Young: Yes, one of the directors is a qualified person.

The Judge: But he was not there.

Mr. Young: He was not there; but in a case of that sort the liability does not attach to anybody who carries on the business or is managing it. It attaches either to the owner of the premises or the vendor who makes up the prescription. Mr. Young at some length argued that the only person liable was the assistant, whose name was Attwood. He then called

Thomas Onion, the defendant, who stated that he was managing director of the company. One of the directors was a qualified chemist.

The Judge: He was; is he qualified now?—Defendant: Not at the present time. His name was W. Adcock.

The Judge: What has become of him?—Defendant: I discharged him; he was no use to me. (Laughter.)

The Judge: Oh! you discharged a director?—Defendant: Yes, for drinking.

Mr. Young: Attwood is not qualified?—Defendant: No.

The Judge: What experience has Attwood had? How old is he?—Defendant: He is eighteen.

The Judge: What experience has he had?—Defendant: He has been at it about a year. He is apprenticed to the company.

The Judge: Do you allow him to make up poisons without superintending him?—Defendant: Oh, no! never, unless I am at the back of him. I was in this case.

The Judge: There is no question after that.

Mr. Granger: I do not think I need ask any question.

The Judge: No; I shall find, as a fact, that this medicine was sold by Mr. Thomas Onion.

Mr. Young: After what he has said, that he stood at the back of the boy and superintended, I cannot contend otherwise.

The Judge: No; I wondered why you contended it all along.

Mr. Young: I should certainly have contended it most seriously if it had been as I understood it. It only shows the folly sometimes of calling evidence for the defendant.

The Judge: Then I will reserve judgment until after the decision of the Divisional Court.

TRADE OR CASH DISCOUNT.

In the City of London Court, on Tuesday, before Mr. Registrar Wild, Messrs. Lumley & Co., of 1 America Square, E.C., sued Mr. C. B. Inman, manufacturing chemist, of Stafford Street, Hunslet, Leeds, for balance of account for goods sold and delivered. The defendant pleaded a set-off for the amount of the plaintiffs' claim for discount, which he alleged he was entitled to, and which the plaintiffs had not allowed him. The plaintiffs' solicitor said his clients' terms were 10 per cent. discount, if paid within a month. For the defence an account was put in which showed that the discount had been allowed when payment was not made within that time. The plaintiffs' solicitor pointed out that on March 29 last a letter was sent to the defendant, informing him that the discount would not be allowed in the future unless the payments were made regularly.

The Registrar said that might be so, but upon again referring to the account he found that the plaintiff had waived that letter in August by allowing the discount after the expiration of the month. He thought the discount was in the nature of a trade discount, and not a discount for cash. He must give judgment for the defendant, with costs.

A TRADE-MARK QUESTION.

In the Chancery Division, on March 7, before Mr. Justice Kay, W. Moyerstein & Co. appealed from the decision of the Controller-General, who refused to register the word "Satinine" as a trade-mark for soaps, perfumery, starch, &c., sold by the applicants, and enumerated in classes 47 and 48.

Mr. R. Wallace appeared for the applicants, and the Attorney-General and Mr. Cutler for the Controller-General.

Mr. Wallace said Messrs. Moyerstein & Co. sought to register the word "Satinine" under the Act of 1883, but the Controller had deferred his decision pending legislation. The applicants renewed their application after the passing of the Trade Marks and Designs Act, 1888, and then the Controller gave his opinion in writing that "Satinine" was

not a proper word for registration. The matter was referred to the Board of Trade, who directed that it should be brought into court.

His Lordship: What are the applicants—are they manufacturers?

Mr. Wallace: No; they sell soaps, perfumery, and other articles.

His Lordship: And they wish to put the word "Satinine" as their trade-mark upon articles which they do not manufacture?

Mr. Wallace replied that that was so. The mark was duly advertised in the *Trade Marks Journal*, and no one opposed the application to register.

His Lordship: On what ground did the Controller-General refuse to register—was it that it was not a "fancy" word?

Mr. Wallace: No; but that it was not an "invented" word, as required by section 10 of the Trade Marks and Designs Act, 1888. The word "Satinine" cannot be found in any of the dictionaries. Section 64 of the 1883 Act required that a word to be the fit subject for registration must be a "distinctive" or "fancy" word; but the Act of 1888 altered that, and required that the word should be an "invented" word.

His Lordship: Then you say that by adding the letters "ine" to the word "Satin" you have invented a word?

Mr. Wallace: Yes.

His Lordship: Let us have an illustration. You take a common word like "soap," and you add "ine," and make "soapine" of it; and you say that that is an invention?

Mr. Wallace: Yes.

His Lordship: There would be a marvellously small quantity of "invention" about it.

Mr. Wallace: That is so; but the quantum of invention is of no consequence.

His Lordship: Then "soape" would be an invented word?

Mr. Wallace: Yes.

His Lordship: All right. "Logic is logic, that is all I say." I suppose you have read that extremely witty poem, "The One-horse Shay"? (Laughter.)

Mr. Wallace: But if the word is not in use it is an invention.

His Lordship: Now, if a man sold spades, could he register the word "spadeine" as an "invention"?

Mr. Wallace: I should say not, because then he would be trying to manufacture the use of the word spade, which is the common name of the article sold. Now, in calling soaps and perfumery and starch "Satinine" there is no reference to satin cloths. If we sold satin goods as "satinine" there would be some apparent attempt to mislead the public. The word "satin-glaze" has been already registered as a trade-mark for starch, an article included in class 47. Now gloss, or glaze, is not a description of starch, for the gloss is the result of ironing, though I don't know much about starch.

His Lordship: We all know enough about starch without being washerwomen—(laughter)—to know that linen when dried will take a higher gloss after being starched than before. "Satinine" may be a description of the gloss or shine which may remain on the face and hands after using your toilet soap. The word "starch-glaze" is already registered, and as starch is one of the things you sell, you cannot register a word descriptive of the gloss or glaze which comes from the use of your starch.

Mr. Wallace said the matter was not capable of much further argument, but he again submitted that "Satinine" was an invented word within the meaning of section 10 of the 1888 Act, and as such was capable of being registered as a trade-mark. He put in and read the affidavits which had been filed.

Without calling on the Attorney-General,

His Lordship said the only invention was the putting at the end of the common word "satin" the letters "ine," and the word, as used in reference to starch, for example, gave one the idea of the gloss which would be produced by its use. With regard to the addition of the "ine," if that was inventing a word it was the easiest mode of invention which one could conceive. The applicants could not use any word, "fancy" word or otherwise, if it was descriptive of the article sold, and, in his opinion, "Satinine" was descriptive of a glossy surface, and was a recommendation of the starch, for instance, which would produce a glossy

surface. That was precisely what the Controiler said, and he gave as a further reason that the word "satin-glaze" had been already registered for an article included in class 47. His Lordship dismissed the appeal with costs.

IMPORTANT DECISION UNDER THE INDECENT ADVERTISEMENTS ACT.

At the Cardiff Police Court on Wednesday (before Mr. T. W. Lewis, stipendiary) William George Duck, chemist, High Street Arcade, was charged with an offence under sections 3 and 5 of the Indecent Advertisements Act, 1889. Mr. M'Lachlan, solicitor to the National Vigilance Association, who proseeded, said that on March 5 his attention was attracted to the window of Mr. Duck's shop, at the end of the Arcade, near St. John's Square, when he saw the bottle produced in the centre of other articles. He purchased it, and paid 2s. 9d. The money passed, and the bottle was given to him outside the shop door. The bottle was labelled, and headed "Injection of Matieo" [Grimault's]; and the matter which followed on the label stated that the injection would "arrest the most inveterate discharges." This referred to the matters mentioned in the sections of the Act, which Mr. M'Lachlan detailed. It was printed matter of an indecent or obscene nature, as provided against under section 3.

The Stipendiary: You say that it is an advertisement of an indecent and obscene character?

Mr. M'Lachlan: Yes, you may read it.

Mr. Belcher, who defended, argued that this was not so. He would like to ask witness if he had visited the Swansea chemists.

Mr. M'Lachlan: I decline to answer.

The Stipendiary was of opinion that Mr. Belcher was not entitled to examine the witness as to his credit, which he thought was well established.

Mr. Belcher, proceeding, said that although they were very pleased to see their friends, he still hoped that Mr. M'Lachlan would, for the future, confine his attention to Swansea. (Laughter.)

Examined by Mr. Belcher, witness denied he had made a running examination of all the chemists' shops in the town, and that this was the only one he could take a case against, for in fact his attention had been directed to this particular window by a police-sergeant.

The Stipendiary: Could you read this label from the street?—Yes, sir.—Well, I must compliment you upon your eyesight, for I can scarcely read it here.

Mr. Belcher: Why did you get the assistant to bring the bottle outside?

Witness: Well, I had my doubt as to whether it was necessary to deliver the advertisement in the highway to make it an offence.

Mr. Belcher: When you read this label your public sense of duty was shocked, eh?—No.

Well, your public sense of modesty then?—Go on.

The Stipendiary, addressing Mr. M'Lachlan, said that to persons of a perfectly innocent mind the advertisement would not have a bad construction, and therefore he thought it could hardly be called indecent. They were proceeding under a penal statute, under which an offence might be visited with hard labour, and he thought they should proceed with discretion. The Act must be strictly construed, and it appeared that the matter contained on the label of the bottle did not come within the meaning of the Act.

Mr. Belcher contended that since shop was not even mentioned in the section, the prosecution was bound to fall through.

The case was dismissed, and Mr. Belcher asked for costs, but Mr. M'Lachlan objected on the ground that the prosecution did not arise out of vindictiveness, but solely out of a desire to benefit the public. The Stipendiary, however, ruled that the defendant had been improperly summoned, and, therefore, deserved his costs.

A CASE against William Price, herbalist, Bute Street, for delivering and circulating certain handbills of an indecent nature was then proceeded with, but as it was stated on the summons, taken under section 3, that the defendant "did deliver," whereas it was an agent who did so, the Stipendiary

ruled in accordance with Mr. Belcher's argument that the summons must be dismissed, and granted a fresh one under section 4.

THE FRUIT SALT BAKING-POWDER CASE.

THE case of *Eno v. Dunn* was heard last week by the Lord Chancellor, Lord Herschell, Lord Watson, and Lord Morris, as an appeal to the House of Lords. Mr. J. C. Eno, the proprietor of "Eno's fruit salt," appealed against an order of the Court of Appeal reversing a judgment of Mr. Justice Kay, who refused a registration of W. G. Dunn & Co.'s trade-mark, "Dunn's fruit salt baking-powder." Mr. Eno opposed the application to register on the ground that the term "fruit salt" was a phrase of his own invention, for the purpose of being applied by him and the general public to a saline preparation first brought out in 1873, and since sold in large and increasing quantities under the name of "Eno's fruit salt," and the term "fruit salt" had become universally known as denoting his saline preparation, and nothing else, and the term had never been used with reference to any other preparation except in fraud of his rights. The respondent, who formerly carried on business in Canada, but had since commenced business in England, applied to register as a trade-mark the words "Dunn's fruit salt baking-powder." This application was opposed by the appellant on the ground of his prior registration of his trade-mark, and of his user of the words "fruit salt." In June, 1887, the respondent applied to register another trade-mark, consisting of a label which contained very prominently and conspicuously the words "fruit salt baking-powder." The appellant gave notice of opposition to the application upon the grounds, amongst others, that it was an infringement of his trade-mark, and was calculated to deceive. The respondent delivered a counter-statement in reply, in which he disclaimed any right to the exclusive use of the words "fruit salt," and alleged that, as the appellant was not, and never had been, a manufacturer or dealer in baking-powder, he was not entitled to oppose the registration of a label including the words "fruit salt." He also denied that his proposed use of the words "fruit salt" was calculated to deceive, and alleged that it was impossible that baking-powder could be used for preparing a beverage, or that the appellant's preparation could be advantageously used for a baking-powder. The appellant, however, denies this latter allegation. The respondent stated, in his affidavits and in his cross-examination, that he adopted the name "fruit salt" as one descriptive of his baking-powder because he had read in Brande's "Manual of Chemistry" that there were certain salts which existed in fruits, and because he knew that cream of tartar, which was a main ingredient of his baking-powder, was one of the most important of such salts. The appellant points out, however, that the respondent had to admit that in Brande's "Manual" the phrase "fruit salt" was not to be found. The respondent admitted that he had seen in Canada advertisements of "Eno's fruit salt." The respondent alleged that there was not the least resemblance between the trade-marks. Mr. Justice Kay and Lord Justice Cotton, in the Court of Appeal, while agreeing that there was no resemblance between the trade-marks, were of opinion that section 73 of the Act had reference to this case, and that the exclusive use by the respondent of the words "fruit salt" as descriptive of his baking-powder would, by reason of their being calculated to deceive, be disentitled to protection in a court of justice, and consequently ought not to be registered in combination with a trade mark. The deception which the learned judges anticipated was that buyers of the respondent's baking-powder would believe it was an adaptation of the appellant's invention, and probably made by him. The respondent, however, says he seeks no exclusive use of the words, and that no one can acquire an exclusive right to them, or be prevented from using them in cases to which they fairly apply, and that they were far more applicable to his baking-powder than to the appellant's preparation. The former, according to the respondent, was proved to have as its main constituent bitartrate of potash, the commonest and most widely distributed salt in fruits, while, he said, by the evidence filed on behalf of the appellant, it was proved that the ingredients found by analysis in "Eno's fruit salt" were not salts found in fruit. The appellants claim, says the respondent, amounts to this, that, although he had no trade-

mark in the words "fruit salt," and had never used them except in combination with his own name "Eno," nevertheless no other trader could use the words, however accurately, as descriptive of an article of commerce, however unlike might be the articles, and however different the trade-marks, without deceiving the public and inducing the belief that the article to which the words were applied was "Eno's fruit salt." The respondent submitted that that claim was unfounded, and that he was entitled both to call his baking-powder "Dunn's fruit salt baking-powder," and to register that name as part of his trade-mark, and in combination with a distinctive design. To hold otherwise would be to give in substance to the appellant an exclusive right to the use of this descriptive term, although it was incapable of being, and had never been by him, used as a trade-mark.

Mr. Aston, Q.C., on behalf of the appellants, said Eno had established a large trade with nearly all the countries of the world, and the article he produced had come to be known in the trade as "fruit salt." From ten to twenty dealers, wholesale and retail, deposed to the fact that the words "fruit salt" meant Eno's manufactured article. It was a new term when Eno introduced it, prior to which it had no scientific signification. It had never been used by any chemist, nor was it to be found in any chemical dictionary. Previous to Eno's introduction of it it was an unknown term. That was not denied on the other side. The result was, that Eno, by spending in some years from 14,000*l.* to 16,000*l.* in advertisements, made his manufactured article known to the world as "fruit salt." Up to 1866 Eno was the unchallenged proprietor of the words "fruit salt."

Lord Herschell: Probably without the words "fruit salt" the trade-mark could not have been registered at all. "Fruit salt" was clearly of the essence of the label.

Mr. Aston said it was a general impression that where words which became indicative of a man's goods became known in the market that, though he had not used them in a dissociated form, he was entitled to register. The outcome of the judgments in the *Orr-Ewing* case was that where men have used certain trade-marks, those trade-marks had certain salient features which had ear-marked them and identified them with the particular traders whose goods they had indicated, and the proprietors of those trade-marks were justified in registering the salient features.

Lord Watson: Eno's preparation was extracted from fruit or elsewhere?

Mr. Aston: Yes—or elsewhere. The ingredients of Dunn's preparation were disclosed; those of Eno's were not.

The Lord Chancellor: But, as a fact, did Eno's come from fruit?

Mr. Aston: So Eno alleged.

Mr. Moulton said there was no evidence on the point.

The Lord Chancellor said he could not understand how anyone wanting an aperient medicine would ask for baking-powder.

Mr. Aston contended that, whether that were so or not, the use of the words "fruit salt" by Dunn were calculated to deceive the public. He submitted that this was a case where a man about to begin a trade was desirous of appropriating to himself the benefit of the reputation acquired by another trader with reference to a particular article. In order to enable him to do that, he made a representation which was not an honest representation. Neither as regarded his object nor as regarded the means he employed was his proceeding of that straightforward character that would justify him in coming to the Controller and asking to be allowed to register as his exclusive property a label containing the catch words "fruit salt." Not only would that be calculated to deceive, but, assuming that Eno chose to embark, as he now could do, in the trade of selling his particular article for baking purposes, he would be unlawfully interfered with. This, he said, was not an honest attempt on the part of Mr. Dunn. He therefore asked that the judgment of the Court of Appeal should be reversed.

The Attorney-General, who followed on the same side, said if "fruit salt" were the same kind of description as "Brougham carriage," "Gladstone bag," "Hansom," or "Singer sewing machine," he should agree that Eno had no right to restrain Dunn; but if, as the evidence showed, "fruit salt" meant "Eno's fruit salt" or its derivative, then he thought previous cases were sufficiently in their favour to prevent Dunn registering.

Lord Herschell: You say "fruit salt" means the powder which Eno prepares?

The Attorney-General: Certainly. The words, he maintained, could only be properly applied to Eno's preparation, and they were not necessary in order to enable Dunn to describe his goods. It might be said—were they not depriving Dunn of the only words describing his goods? Why did Dunn not put "baking-powder extracted from fruit salt"? They could not restrain him putting any description on his goods to describe what they were. But he submitted that Dunn was not entitled to take as his trade-mark words which would be or might be understood by common people as referring to a preparation now known in the market only as "Eno's fruit salt."

The Lord Chancellor said the parties seemed to be so near each other that he could not help asking why they could not now do what they asked Mr. Justice Kay to do?

Lord Herschell: Dunn might call it "fruit salt extract baking-powder."

The Attorney-General doubted whether "fruit salt" was chemically or commercially a correct description of Eno's preparation, but it had been so described in the market. He could well imagine Dunn saying that the acids in his baking-powder were the same as used in "Eno's fruit salt." Of course he did not mean to make any admission that they were.

The Lord Chancellor thought it important to notice that in this case the trade-marks of Eno and Dunn were as unlike as anything could be. It was consequently the use of the two words "fruit salt" which could alone constitute the infringement.

The Attorney-General: Yes, because a person who went to buy "Dunn's fruit salt baking-powder" probably did not see at the time Eno's label.

The Lord Chancellor said he could understand that observation if they were articles of the same class.

The Attorney-General: But the public was not protected simply and solely because articles were not in direct competition. A wider discretion was intended to be given to the Controller; and if the fair inference from the evidence was that the public might think this was a derivative from Eno's preparation, their lordships ought to hold that such a trade-mark ought not to be permitted by the Controller.

Lord Watson: It was not necessary to use the words "fruit salt" at all. A man called a bag a bag because he could not well term it anything else, but to call this salt was putting the case a little too strong.

The Attorney-General: Yes; and if it were not to get the advantage of Eno's reputation, and to make the public believe that the maker of "fruit salt" was in some way mixed up with the "fruit salt baking-powder," he could not understand what the words were used for.

Lord Morris: He might want to get the advantage of the popularity of those two words.

The Attorney-General: Then I say he is not entitled to it.

Before retiring for luncheon, the Lord Chancellor again suggested that as the parties were so near they might come to terms. After luncheon, the Attorney-General said he was afraid they could not come to terms.

The Lord Chancellor said they must either settle or go on.

Mr. Monlon, Q.C., then addressed their lordships on behalf of the respondent. He said he could not help feeling that during the long arguments for the appellant his client had been represented as a man who had done a dishonourable thing, and who wanted to get the credit of the popularity of "Eno's fruit salt." So far was that from being the case, rightly or wrongly, his client felt that "Eno's fruit salt," being a medicinal preparation, would rather stand in his way. No person could have used the words "fruit salt" in connection with baking-powder in a way which, he should submit, more clearly showed that he had no intention of its being thought to be Eno's preparation. The appellant simply wanted to get indirectly what the law did not allow him to get directly—namely, a monopoly of the words "fruit salt."

Lord Herschell asked if Dunn was not seeking to get a monopoly of the words?

Mr. Moulton said certainly not; they did not want a monopoly of the words. Indeed, they had disclaimed any exclusive right to the words "fruit salt."

Lord Herschell: But suppose you had not disclaimed it. Do you say that any one if you had been registered, could also register, say "Jones's fruit salt."

Mr. Moulton: Certainly. They were bound to disclaim any exclusive right, because they said "fruit salt" were English words which anyone had a right to use. It was true Eno had called evidence to show that he was the only person making anything by the name of "fruit salt," and that people who asked for "fruit salt" meant Eno's preparation, but that was not sufficient to give him any proprietary in the words.

Lord Herschell: No; but it might be sufficient to prevent anyone else using them as a trade-mark.

Mr. Moulton said what he proposed to establish was that Eno had no proprietary rights in the words, and they must look at the conduct of Dunn and the rights of Eno from the point of view that Eno had no proprietary rights, and if that were so, then his client was entitled to have his trade-mark label. Eno clearly had no trade-mark in the words "fruit salt."

The further hearing of the case was adjourned.

Gazette.

PARTNERSHIP DISSOLVED.

Powell & Price, Ross, surgeons.

THE BANKRUPTCY ACT, 1863.

RECEIVING ORDEES.

Druliff, Lionel (trading as Henry Laurance, and as the Society of London Opticians), Hatton Garden, E.C., and Doughty Street, W.C., wholesale and manufacturing optician.

West, Rowland Hill, Taunton, Master of Arts, and surgeon and apothecary.

FIRST MEETINGS AND PUBLIC EXAMINATIONS.

Harrison, William Sallsbury, late of Sooderland, medical student—March 14, Official Receiver's office, Sunderland; March 13, Court House, Sunderland.

West, Rowland Hill, Taunton, Master of Arts, surgeon, and apothecary—March 18, Official Receiver's office, Taunton; March 19, Guildhall, Taunton.

ADJUDICATION.

West, Rowland Hill, Taunton, Master of Arts, and surgeon and apothecary.

NOTICES OF DIVIDENDS.

Critchley, William, Bolton, mineral-water manufacturer—first and final div. of 9s. 5½d., March 14, 16 Wood Street, Bolton.

Garlike, Edward William Bennett, Ipswich, surgeon—first and final div. of 1s. 8½d., March 12, Official Receiver's office, Ipswich.

Tyson, Thomas Balmforth, late of Werthing, pharmaceutical chemist—first div. of 4s., March 19, Official Receiver's office, Brighton.

APPLICATION FOR DEBTOR'S DISCHARGE.

Singleton, John, Kendal, physician and surgeon—April 8, Court House, Kendal.

EXTRACT FROM THE REGISTER OF DEEDS OF ARRANGEMENT.

The following deeds of arrangement with creditors have been filed at the Bills of Sale Office, under the provisions of the Deeds of Arrangement Act, 1887. Some of these deeds are for the purpose of carrying out compositions with creditors (and such are specified below), but the great majority of them are "assignments" in the ordinary form, to a trustee or trustees, for the benefit of creditors. The Act referred to expressly provides that registration shall not give validity to any deed which is an act of bankruptcy, and there is no provision in the Act, making any of these arrangements binding upon dissenting creditors.

Tesh, S. A. & Co. (Samuel Tesh, trading as), Nelson Yard, Broad Street, Park, Sheffield, and 63 Fox Road, Sheffield, drysalter. Trustee: Cowton Appleby, Queen Street, Sheffield, accountant. Date, Feb. 28; filed, March 7; unsecured liabilities, 1051. 7s. 8½d.; estimated net assets, 431. 17s. 6½d.; preferential creditors, 11. 2s. 6d.

Fryers, Thomas & Co., Nelson (Lancaster) ..	£ s. d.
Keellog, D. C. & Co., Liverpool ..	.. 24 0 0
	.. 26 10 0

(And fifteen under 10/.)

BANKRUPTCY REPORT.

EWEN MACDONALD, 84 High Street, Cheltenham, Chemist and Druggist.

AT the first meeting of creditors of the above the statement of affairs submitted showed liabilities 200*l.* 6*s.* 6*d.*, and assets, stock, and fittings estimated to produce 150*l.*; good book debts 52*l.* 3*s.* 11*d.* The causes of failure were stated to be "bad health and competition in trade." The Official Receiver reported that the debtor commenced business about ten years ago with a capital of 230*l.*, which he borrowed of his brother. He had kept a day-book and credit ledger and the usual books of a chemist and druggist, but it was impossible for him to show at any time how he stood. He appears to have sold his furniture about six months ago to pay a creditor who had obtained judgment, and the cause of his filing his petition was that another creditor for 39*l.* had issued execution. He (Official Receiver) had advertised the stock for sale, but had only received one offer of 88*l.* Before accepting this he should get a valuer to inspect the contents of the shop. The matter was left in the hands of the Official Receiver.

TRADE-MARKS APPLIED FOR.

THE *Trade Marks Journal* publishes the following notice:—"Any person who has good grounds of objection to the registration of any of the following marks may, at any time within one month of the date of this journal, give notice in duplicate, at the Patent Office, in the form 'J,' in the second schedule to the Trade Marks Rules, 1883, of opposition to such registration." All communications to be addressed to H. Reader Lack, Esq., Comptroller General, at the Patent Office, 25 Southampton Buildings, Chancery Lane, London, W.C.

From the "*Trade Marks Journal*," March 5, 1890.

Picturesque designs showing the god Buddha and other figures; also figures in armour fighting; also two elephants beneath a palm tree; and sketch of tiger; for chemical substances, raw and partly-prepared vegetable, animal, and mineral substances, and aniline dyes. By the Actien-Gesellschaft für Anilin-Fabrikation, Berlin. 93,950, 93,962, 93,963, 94,079, 94,080.

"CASSON BRAND" on shield surmounted with a knight's helmet; for paints, pigments, varnishes, &c. By Casson & Co., Great Richmond Street, Liverpool. 94,189.

The letter X with black impress of figure in gown; for chemical substances. By Hay, McNichol & Co., Kelvin Chemical Works, Maryhill, Glasgow. 94,659.

"RHIZOME"; for artificial and other manures. By the Phospho-Guano Company (Limited) Seacombe, Cheshire. 92,258.

"STAPLES' CATTLE CLEANSER," with sketch of a bull's head and sheep on label; for non-poisonous cleansers for cattle. By Staples Brothers, Bugg, Lincolnshire. 94,078.

"KEHOTAH"; for a medicinal preparation for human use. By L. A. Evanovitch, trading as Holland & Co., 25 Hart Street, Bloomsbury. 93,325.

"BORTHWICK'S BOUILLON" and other wording on label and bottle; for an extract of beef. By F. L. & J. M. Borthwick, 3 Douglas Road, Canonbury, London. 93,645.

"UNAWATHE"; for food or ingredients in food. By the Tea Supply Association, 81 Southwark Street, London. 94,054.

Picture of harp, and lighthouse, sea, and ship in full sail; for food or ingredients in food. By Baker and Wright, 48 Patrick Street, Cork. 94,096.

"St. DUNSTAN," with sketch of church spire, for food substances and ingredients in food. By H. T. Mennell & Dodds, St. Dunstan's Buildings, Great Tower Street, London. 94,156.

"EUROPHEEN" and "LOSOPHAN"; for new pharmaceutical products. 94,843, 94,844.

"ORTHODOX," with picture of native Indian and Chinese; for food substances and ingredients in food. By W. G. Dell, 8 Clapham Common, south side, London. 94,246.

"MAY MORN," "MAY DAY," and "MAY QUEEN"; for food substances or ingredients in food. By The Planters and Traders Association, 8 Eastcheap, London, E.C. 94,457, 94,458, 94,459.

From the "*Trade Marks Journal*," March 12, 1890.

"FINLAY'S SOAP," and sketch of plant; for chemical substances for veterinary and sanitary, &c., purposes. By Alexander Finlay, Ann Street, Belfast. 94,149.

"BLAIR'S GOUT AND RHEUMATIC PILLS"; for human use. By John Prout, trading as Prout & Harsant, 229 Strand, London. 87,049.

"FRAMPTON'S PILL OF HEALTH"; for human use; and "PROUT'S STICKING PLASTER"; for a medical and surgical sticking-plaster. By John Prout, trading as Prout & Harsant, 229 Strand, London. 87,051.

Circular strap label, with signature and other wording; for pills, ointment, rheumatic, gout, and ough mixture, and teething-powders. By R. Hutchinson, 156 Loughborough Road, London. 93,899.

Sketch of a castle, with landscape; for medicated and perfumed soap. By Alexander Ogston & Sons, Aberdeen, North Britain. 94,152, 94,153.

"ADONIS," and signature; for medicine for human use and application. By D. Savage, 118 Shepherdess Walk, City Road, London. 94,225.

"MAGDALENE"; for oils for human use in medicine and pharmacy. By James Baker, 46 South Street, Worthing, Sussex. 94,254.

"HEPATONE," and other wording, on label; for a cure for liver complaint and indigestion. By H. C. H. Oliver, West Malling, Maidstone. 94,358.

"ALBATROSS BRAND," with sketch of an albatross; for food substances and ingredients. By G. Hooper & Co., Billiter Square Buildings, London. 93,994.

FRANKLIN'S "ARCTIC" and "ALERT AND DISCOVERY" sauce and relish. By Frederiek Frankliu, Commercial Road, Landport. 94,418, 94,419.

"E. LOGSDON," as signature; for mineral and aerated waters. By E. Logsdon, Suu Brewery, Hitchin. 94,599.

"WALTER MOORHOUSE," as signature; for mineral and aerated waters. By W. Moorhouse, Wood Street, Wakefield. 94,600.

Sketch of a peacock; for mineral and aerated waters. By W. S. Dove, High Street, Rochester. 94,765.

"EIZZIL"; for a hair-restorer. By Elizabeth Robinson, Quarry Bank, Stockport Road, Timperley. 94,416.

"TELEGRAPH"; for perfumery and toilet articles. By William Gossage & Sons, Widnes. 94,788.

"DOOGLIA"; for perfumery and toilet articles. By C. M. Luxmoore, 529 Battersea Park Road, London. 94,877.

LORD RAYLEIGH, of London, was on March 10 elected by a unanimous vote a corresponding member of the Academy of Sciences for the section of physics.

ENGLISH as she is advertised in a Japanese paper:—"This teeth powder is not common thing, as is sold in the world, it is powerful to hold the health of the teeth, and recover the teeth from its siek. If you only examine should find that it never tell a lie."

A MUSICAL DRUG.—A sentence catches our eye on page 389 of the new edition of the "*Extra Pharmacopœia*." A certain drug is spoken of as "supposed to contain a little violin." Unhappily it does not give rise to pleasant anticipations such as a Stradavarius would do, for it "resembles emetin in action." *Viola tricolor* is its source.

REGISTERED **"SANITAS"** TRADE MARK.
IS THE IDEAL
DISINFECTANT,

And is most used in Antiseptic Surgery.

LARGEST SALE IN THE WORLD.

The Trade, in their own interest, should stock all our "Sanitas" Preparations.

KINGZETT'S BACTERICIDES
AND
PATENT PRESERVED PEROXIDE OF HYDROGEN
THE SANITAS CO., BETHNAL GREEN, E.

SHOW CARDS, 24×17 or 17×12,
Free to any Address in the United Kingdom.



See First Page, facing inside of front of Cover, in first issue of the month for latest particulars.

EXALGINE

(METHYL-ACETANILIDE— C_9H_9NO).

NEW SYNTHETIC ANALGESIC.

Recommended by Prof. Fraser, M.D., F.R.S., of Edinburgh,
for

NEURALGIA, SCIATICA, ANGINA, &c.

WRIGHT, LAYMAN & UMNEY,
SOUTHWARK, LONDON.

MEDICAL ELECTRICITY.



EVERY DESCRIPTION OF
Galvanic, Faradaic, and Electro-Magnetic
Machines and Electrodes, Galvano-Cautery and
Lighting Instruments.

Lists free. Descriptive Catalogue, 100 illustrations,
32 pages, 4 stamps.

GENT & CO., LEICESTER.

SILICATED CARBON FILTERS



PATENT SELF-AERATING
MOVEABLE BLOCKS

WORKS, BATTERSEA LONDON. S.W.

MOSS'S CASCARA

BARK—Fine selected quality, as used for making our
EXTRACTS—Solid and Liquid, B.P. and Tasteless

*Our preparations may be obtained through Wholesale Houses,
or direct from*

JOHN MOSS & COY

Makers of Galenical and Medicinal Chemicals

Galen Works, Wilson St., NEW CROSS ROAD, S.E.

MUMFORD'S

FARRINGTON ROAD, LONDON, E.C.

PURE CRUSHED LINSEED IS NOW
17/- cwt. CARRIAGE PAID

TO ANY RAILWAY STATION IN ENGLAND, AND HALF TO
STATIONS IN SCOTLAND, IRELAND, AND WALES. [2]

The daily orders we receive for

LANO-CREOLIN

AND

CREOLIN-GAUZE

Are proofs of the efficacy of these prepara-
tions.

We invite Retail and Wholesale Chemists to communicate with us
regarding the stocking of these Medicinal Goods.

JEYES' SANITARY COMP. CO., 43 CANNON STREET, LONDON, E.C.

EDITORIAL NOTES.

CHEMISTS' PROFITS.

A PAPER called *The Lady* has lately published a very unlady-
like and ridiculously unreasonable attack on chemists and
druggists, giving some quite misleading statements concern-
ing the profits on drugs and medicines. We notice that in
the last issue of the same paper a somewhat lengthy refuta-
tion of the article appears over the signature of Wm. Hayes
& Co., pharmaceutical chemists, Grafton Street, Dublin.
We should have scarcely supposed that the writer in our
contemporary was worthy of the attention given him, but
Messrs. Hayes seem to have thought differently, and their
reply is very complete. They point out first the expense of
getting qualified. That means, they say, 250*l.* to 500*l.*
Then they say that in THE CHEMIST AND DRUGGIST dozens
of businesses are offered weekly, the gross returns of which
are 500*l.* or under. They assert that the gross average profit
for a retail chemist and druggist does not exceed 40 per
cent., and calculating on this basis they show that a
business whose annual returns are 500*l.* will yield only 200*l.*
gross profit, and from this they deduct 40*l.* for rent, taxes,
&c., 20*l.* for interest on capital, 80*l.* for an assistant, and 20*l.*
for gas and other charges, leaving the poor chemist only 40*l.*

for himself. He may do without an assistant, but in that case "he is tied to his house of business as no man ought to be."

Messrs. William Hayes & Co. indicate besides a great many mistakes in prices made by the writer of the article to which they reply, his quotations being often given for crude articles, and the retail prices being those for pure drugs. But the most interesting item in their letter is a calculation in reference to dispensing profits. They take twenty prescriptions from a day's dispensing, without selection, and show as follows the actual cost and profit on these:—

No.	Ingredients used.	Price sold at.	No.	Ingredients used.	Price sold at.
	s. d.	s. d.		s. d.	s. d.
1	.. 0 3	0 6	17	.. 0 2	1 6
2	.. 0 5	1 4	18	.. 0 0½	0 2
	.. 0 4	1 4	19	.. 0 1	0 8
4	.. 0 4	1 6	20	.. 0 0½	0 2
5	.. 0 3	1 4			
6	.. 0 4	1 2		5 9½	£1 2 4
7	.. 0 3	1 0			
8	.. 0 1	0 2	Add bottles, pots,		
9	.. 0 4	0 10	labels, wrappers,		
10	.. 0 6	2 0	wax, &c.	.. 3 0	
11	.. 0 ¾	1 2	Assistant's salary	6 0	
12	.. 0 1	1 6	Messengers	.. 1 8	
13	.. 1 0	2 2			
14	.. 0 7	1 6		16 5½	16 5½
15	.. 0 2	1 0			
16	.. 0 3	1 4	Net profit to chemist	5 10½	

And here no allowance is made for rent, rates, taxes, gas, bad debts, &c. It must be remembered, too, that not a large number of chemists dispense 20 prescriptions per day; those who do more than that number will have to keep another assistant. Among the above are two for two pills each. Messrs. Hayes say, "We got 4d. for the two lots, and provided an envelope for the prescription, copied it in a book for the convenience of the customer, gave a box, label, and wrapper in each case. Is there any carpenter, bricklayer, or tradesman of any kind who would lift his tools for the money?" No; nor should any chemist do such work for such a price. There are not many customers who would not be ashamed to be worked for at that rate.

In the 20 prescriptions referred to, 12, we are told, contained a poison. The risks of damages which a chemist incurs have also, as Messrs. Hayes point out, to be allowed for, and they reasonably claim that the chemist who fits himself for carrying on a business of so much responsibility is entitled to such payment as will enable him to maintain a respectable position in society. Their analysis goes to show that his prospects of doing so are not very rosy, but it ought to enable the public to appreciate a little better his deserts, and the risks they run in purchasing their medicines from unskilled dealers.

THE LEGITIMATE DEMANDS OF CHEMISTS.

We have been receiving and printing for some weeks past some stirring letters from Mr. Alfred Coleman, pharmaceutical chemist, Cardiff, who aims, as we understand, to thoroughly test the opinion of his fellow-members of the Pharmaceutical Society at the next election, and to get then elected, if possible, a body of men imbued with ideas more in accord with what he, Mr. Coleman, believes to be those prevalent among the rank and file of the Pharmaceutical Society and of the trade than are those with which the present rulers at Bloomsbury Square seem to be inspired.

We have given space to these letters with pleasure for

represented in the Pharmaceutical Council, or should at least ascertain by direct contest whether they can command enough votes to justify their claim that they represent the true views of the majority of the members; and, secondly, because in advocating his views Mr. Coleman has been quite definite in expressing himself, and has wasted no ink in vain apologies for his attitude, nor in idle abuse of the opponents whose policy he attacks. We have reason to believe that Mr. Coleman has been writing on behalf of a group of chemists in various parts of the country who have been planning—conspiring, if their opponents prefer the term—to effect a complete change of personnel at the forthcoming election. We have no idea of the strength of this insurrectionary movement; it has been conducted with considerable secrecy, and consequently we should suppose with some difficulty. But we may express the hope that at least a sufficient number of serious candidates ready to serve have been secured and will be nominated. Unless this is the case Mr. Coleman's letters have no meaning. Mr. Carteghe is quite justified in taunting his opponents with their inability to get men willing to supplant himself and his colleagues—willing, that is, to give the necessary time and labour. Unless these can be got, abuse of the present Council is mere vapouring.

In his letter this week Mr. Coleman indicates the ultimate object of his agitation. It is to obtain "at no distant date" an Act to restrict the dispensing, compounding, and vending of all medicines to the qualified chemist; and in order to attain this object, or rather to get the necessary motive power to work for it, he would alter the conditions of entrance into the Pharmaceutical Society so as to bring into that organisation the great majority of the registered chemists of the country. On these schemes we are obliged to part company with Mr. Coleman. Something like them may be realisable in the far future, but if they are put forward as practicable objects to work for now, we say that this is a proposition to waste more time and money on absolutely visionary projects. The idea of getting the whole trade to work as one man underlies everybody's plan, and if anything is established by experience, it is that nothing of the kind can be looked for. Moreover, apart from the fact that the outsiders will not come in, there is the other difficulty, that the insiders will not have them, and a very little opposition on the part of these to an invasion of their acquired rights would suffice to prevent any alteration of the Society's conditions by Parliament. But even assuming that all chemists could be got to unite in the suggested demand, does Mr. Coleman, or anyone else, know of any two members of Parliament who would back their claim to be the exclusive vendors of medicines when this proposal should be definitely stated in the form of a Bill? What we want from the Council is that they should get a great deal more out of their present Act; that they should enforce it vigorously, even against their own members, when necessary; that they should get it mended where it is defective, and enlarged where this is possible. These things could be done by a vigilant and well-informed Council without rushing into the opposite extreme of putting forward impracticable schemes which take no sufficient account of the forces which would oppose them.

THE DRUG TRADE IN COUNCIL.

The proceedings at the annual meeting of the chemical section of the London Chamber of Commerce, on Wednesday, were largely taken up by a retrospect of the action of

rates. The thanks voted by the section to Mr. Umney and his colleagues—Messrs. Howard, Francis, Evans, and Lescher—were well deserved, as the vast amount of time and painstaking application which the committee have devoted to the question could undoubtedly have been turned to account in a manner more directly profitable to these five eminent representatives of the drug trade. In fact, the pity of it is, to our mind, that so much trouble and energy should have been expended upon an object of such purely academic interest. Mr. Howard's evidence at Westminster, which we reported a few weeks ago, was useful in placing on record the exact requirements of the drug and chemical trades; but apart from that evidence, and one or two other valuable contributions to the controversy, the fight against the proposed revision partakes largely of the classic assault upon the windmills. It would certainly be an excessively grave matter for all trades if the railway companies were ever to become so insensate as to apply the full powers which they are now seeking. The thick red line on Mr. Umney's chart in which he shows that the railway companies could pile up the rate on merchandise to a prohibitive figure looks alarming; but we cannot discover any reasonable ground for the assumption that they should suddenly adopt a policy directly opposed to that which they have followed hitherto, and proceed to bleed their customers to death out of pure cussedness. Mr. Umney shows that the railway representatives are coming round to the views of the traders. This is well, and it may be pointed to as evidence of the good effect produced by the opposition. Or it may be no more than an instance of the usual result of two business organisations discussing matters in which both are concerned, and then it might have been accomplished without the help of half a dozen lawyers. The observations of the chairman of the section show that its members are not to be allowed to recline among the Lotus eaters now that the Railway Commission is vanishing into a Scotch mist. Perplexing questions of great importance are already casting their shadows over the agenda pages of the coming session. There is the red spectre of the Labour question to which Mr. Tyrer alluded, and with which, from his association with a particularly turbulent quarter of political London, he ought to have special qualifications to grapple. The chairman said a word in favour of arbitration, and committed himself to the significant opinion that the reference of trade disputes to fixed arbitration tribunals will ere long be made obligatory by law. In the meantime, as a contribution to our enlightenment on a subject with which the chamber appears likely to be busy before long, we might suggest that that body would do well to obtain the fullest possible particulars of the working and the scope of the French *Conseils de Prud'hommes*, which are probably the nearest extant approach to those legal courts of which the chairman foresees the speedy establishment. The Merchandise Marks Act is also likely to obtrude itself again upon the attention of the chamber. In his very lucid and important observations on the working of that Act, the chairman put forward objection to the measure from the standpoint of the merchant as apart from the manufacturer, urging that the provision which requires the place of origin to be clearly stated upon the article, so far from acting as a deterrent, has been a magnificent advertisement for our Continental competitors, who have thereby been enabled to secure direct business relations with buyers across the seas, whom they previously served unwittingly through British intermediary. Mr. Howard Vincent is about to bring before Parliament the question of the desirability of revising the Merchandise Marks Act, and the Chamber of Commerce may

in this connection be invited to state its views. The direction in which the member for Central Sheffield desires to revise the Act may be surmised from the views which he has expressed with regard to the importation of foreign goods, including his proposal to make it compulsory to colour butterine bright red in order to protect the butter industry. The action of the chamber in regard to the Act is not easy to forecast, but it is clear that in the chemical section at any rate a discussion of the subject will reveal the existence of strongly opposing currents. The chairman regretted that we had no effective means of influencing our colonies to adopt the Merchandise Marks Act. This was surely a slip. As a matter of fact, that Act, or a measure very closely resembling it, is now in force in almost every colony of commercial importance, and certain continental states—Switzerland, for instance—are also taking steps to follow us in legislation of a similar nature. A third important question not unlikely to occupy the attention of the chamber during the coming year is that of patents and trade marks. It will be seen, therefore, that there still remains ample opportunity for the president and the members of the chemical section to add to their laurels by the accomplishment of practical work

COMMENTARY.

COMPANY PHARMACY did not shine very brightly in the case of the Pharmaceutical Society v. Onion, which we report from the Birmingham County Court this week. The defendant was the manager of the business. He was himself unqualified, but seems to have relied for the pharmaceutical reputation of his company on the fact that they started with a qualified director. This qualified gentleman had, however, been discharged by his unqualified manager on the ground that he was of no use. The manager and a youth, also unqualified, managed the compounding and vending of poisons between them in such a way as to leave it open to argument which was the seller from a judge's point of view. We do not by any means imply that any confusion was intended, but it is obvious that the system rendered it possible to argue whichever was attacked that the other person was the seller. By a few questions, which, if it were not disrespectful to the Court, we might describe as "foxy," the judge led the defendant to give himself away, to the consternation of his counsel, and his chances of escaping the penalties sued for depend now on the very slender hope of a decision in favour of the appellants in the case of the Pharmaceutical Society v. Wheeldon in the Queen's Bench Division.

THE EXTRA PHARMACOPŒIA.—The sixth edition, making the 36th thousand, of this deservedly popular work has just appeared. It has been carefully revised, and in some sections condensed; but the new matter added necessitates a net increase of about 50 pages. The therapeutic uses and the pharmacy of the many modern chemical compounds used in medicine account for a large proportion of this increase. The authors, Messrs. Wm. Martindale and W. Wynn Westcott, M.B., are to be congratulated on the professional appreciation which their efforts have met, and pharmacists and medical men are equally to be congratulated on the carefulness and skill with which the salient points of modern pharmacy are presented in this handbook. We notice that the index has been considerably enlarged.

THE NATIONAL ASSOCIATION FOR THE EMPLOYMENT OF RESERVE AND DISCHARGED SOLDIERS.—We have received

the fourth annual report of this excellent institution, which seeks to get applications from employers of labour for suitable men as they leave the army. Firms who can make room for such men occasionally are likely to get well-trained servants, and will at the same time do the State some service, as the success of the short-service system in our army depends to a large extent on the prospects the men may have of finding occupation after their five years of military life. The offices of the Association are at 12 Buckingham Street, Strand, and Lieutenant-Colonel Boyes is its secretary.

THE SALE OF PENNYROYAL.—Dr. J. G. Marshall is of opinion that pennyroyal has a much more decided action as an ecboic than medical men generally accredit it with (*British Medical Journal*). The women who use it assert that it serves the purpose for which they intend it. There is, he says, great difficulty in collecting evidence as regards the real action of such a drug, and although chemists sell it in the full belief of Taylor's statement that it has no ecboic property, at the same time they know that the catarrh for which it is asked is not one of the respiratory system. The purchaser naturally keeps her secret to herself, and will not relate her experience to anyone. Dr. Marshall is certain that Taylor's opinion requires considerable qualification, and thinks that the sale of pennyroyal indiscriminately by druggists should be forbidden.

A STRANGE STOMACH.—Dr. James McNaught, of Newchurch, near Manchester, gives particulars in the *British Medical Journal* of a case of flatulency, which showed certain remarkable features. The patient was a spare man of 24, who had had stomach troubles for fully four years. When he consulted Dr. McNaught the disorder had reached a serious stage, dilation of the stomach being excessive and continuing from meal to meal. Dr. McNaught emptied the stomach, and found the acidity of the contents to equal 3·2 grammes of caustic soda per litre, 0·55 gramme being due to volatile acid, and 0·18 gramme to lactic. The most curious feature, however, was in the gas which was given off. A preliminary experiment, with the stomach contents in a flask, had shown that it was inflammable, and to confirm this Dr. McNaught poured water into the man's stomach in a thin stream, and ignited the gas as it issued. The result was a flame of such dimensions that both doctor and patient were alarmed, and the experiment was not repeated. A sample of the gas was collected from the experimental flask, and an analysis by Dr. Bailey, of Owens College, showed that it consisted of 56 per cent. of carbonic acid gas, 28 per cent. of hydrogen, 6·8 per cent. of marsh gas, and 9·2 per cent. of residual air. Such a gas would indeed be inflammable. A microscopic examination of the stomach contents showed the presence of yeast-cells, as well as of a bacillus, which may be *Clostridium butyricum*, for it behaved like that organism; and one peculiarity of the flatulency was that there was no difficulty of noticing by the odour that butyric fermentation was active in the stomach.

THE COMMERCIAL VALUE OF GREAT BRITAIN.—At a recent lecture on this subject, delivered at the London Institute, Finsbury Circus, Mr. J. Scott Keltie, librarian of the Royal Geographical Society, stated that, including every scrap of land over which we had any claim, the area of the Empire was nearly one-fifth of the land area of the globe. It was nearly three times the size of Europe, and just about a million square miles less than the area of Africa. On this immense area lived something like 350,000,000 people. Thus, of the total population of the globe, about one-fourth or one-fifth were our fellow-citizens. An

agricultural country could never support a very dense population, and in so small a country as ours could never have much surplus capital for great enterprises or surplus inhabitants for purposes of colonisation. Our coal and our iron had, to a great extent, been the making of us, and had enabled us to avail ourselves of our geographical advantages. The total value of our trade had grown enormously within the past thirty years. In 1860 imports and exports together amounted to 365,000,000*l.*; in 1889 their value was 740,000,000*l.* Our imports thirty years ago were valued at 210,000,000*l.*, now they were 427,000,000*l.*; our exports thirty years ago were 164,000,000*l.*, now they were 313,000,000*l.* The population of the mother-country was to-day close on 38,000,000, or just about one-eighth part of the whole of her Majesty's subjects. The whole trade of the Empire might be valued, imports and exports, at about 1,200,000,000*l.*, of which about 68 per cent. was the share of the mother-country, leaving just 32 per cent. to the vast remainder of the Empire. This total trade of the Empire was just one-half of the trade of all foreign countries put together. About five-sixths of India's imports of merchandise came from us, while of India's own produce about three-eighths came to the United Kingdom. Whatever habitable parts of the earth were available for European settlement had fallen to the lot of English-speaking peoples, and among them we must reckon the United States, which we could not treat as a foreign country, and which did an annual trade of 300,000,000*l.*, of which 90,000,000*l.* was with the old mother-country, who in this matter stood far ahead of all others. In one form or another the English language was the medium of communication for something like 400,000,000 people—nearly one-third of the population of the earth; and some who tried to forecast the future thought it might yet become the universal language.

AQUA LAUROCERASI.—An interesting note on the relative yield of hydrocyanic acid from uncut and cut cherry laurel leaves is the outcome of an investigation undertaken by two Dutch pharmacists—A. van der Bovenkamp and W. van Eeck. Taking 2 kilos. of the leaves, one-half was cut and digested at 40° C. with 5 litres of water. The uncut leaves were similarly treated, and 1,750 c.c. from each was distilled after a few hours' digestion. Centinormal silver nitrate solution was used for titration, and fractional portions of the distillate were examined, with the following results:—

Uncut leaves			Cut leaves		
	500 c.c.	70·60 c.c. $\frac{1}{100}$ AgNO ₃		500 c.c.	46·60 c.c. $\frac{1}{100}$ AgNO ₃
1.	500 "	38·76 "	1.	500 "	2·08 "
2.	200 "	10·56 "	2.	200 "	14·2 "
3.	100 "	8·12 "	3.	100 "	10·8 "
4.	200 "	6·8 "	4.	200 "	10·0 "
5.	150 "	5·8 "	5.	150 "	6·8 "
6.	200 "	4·4 "	6.	200 "	4·6 "
7.	200 "	2·4 "	7.	200 "	2·8 "

The fractions from 1 to 5, amounting to 1,200 c.c., gave in the case of the uncut leaves a water containing 0·106 per cent. of real hydrocyanic acid, while that from the cut leaves only reached the strength of 0·078 per cent. HCN. These results were corroborated in the main by duplicate experiments, the first 500 c.c. of distillate from 500 grammes of uncut leaves showing 0·099 per cent. HCN, and from cut leaves 0·057 per cent. HCN. It will be observed that these results indicate that the process at present followed by the British and some other pharmacopœias is wrong in principle—indeed, it would seem to be impossible to distil 20 oz. of 0·1 per cent. water from 16 oz. of chopped and crushed leaves. Perhaps our Pharmacopœia authorities will look into the matter.

FRENCH PHARMACEUTICAL NEWS.

(From our Paris Correspondent.)

PHARMACISTS REWARDED.—A number of medals have been distributed among members of the various councils of hygiene, as a reward for their devotion to the public good. Most of the distinctions fell to the lot of physicians, but a gold medal was awarded to M. Gebhart, a pharmacist at Epinal; a silver medal to Professor Blarez, of Bordeaux; and a bronze medal to Dr. Tisserand, a veterinary surgeon.

AGAINST ADVERTISING QUACKS.—The syndicate of Havre physicians have passed resolutions praying for the following additions to the Medical Bill now before Parliament:—(1) Anyone, not a doctor of medicine, who shall advertise that he will cure certain diseases, to be deemed guilty of illegally practising medicine. (2) If the delinquent be an *officier de santé*, pharmacist, dentist, or a midwife, to be in addition liable to temporary suspension from his privileges.

A NOVEL ANTISEPTIC PAPER has been devised by M. Duquaire of Lyons. The material consists of asbestos, with about five per cent. of ordinary paper pulp, worked into soft paper, and soaked in a petroleum-benzine solution of bees'-wax. The solvent having been evaporated off in open air, the tissue is ready for use. All that is necessary is to set it afire with a match, after which the paper, thus made completely aseptic, may be employed for dressing wounds, with or without iodoform or other antiseptics.

THE COMPETITION SYSTEM.—The situation of laboratory manager (*chef de laboratoire*) at the pharmacie centrale of the Paris hospitals having become vacant, it has been decided for the first time that the place shall be awarded by competition. The candidates must hold the degree of pharmacist of the first class, and not be over 35 years of age. At the competition, which is to take place on April 15, a goodly number of candidates will no doubt appear, and do their best to carry off the prize.

ETHYL AND METHYL FLUORIDES.—M. Moissan has related before the Academy of Medicine a series of experiments on animals, to compare the physiological action of chloric with fluoric ethers. Ethyl fluoride he found to be, like ethyl chloride, an anæsthetic; but it is not easily manageable, because a slight excess proves rapidly poisonous. Methyl fluoride, on the other hand, was observed to cause undoubted anæsthesia, easily obtained comparatively, and unaccompanied by previous excitement. Further experiments are in progress in the same direction, and so are others with fluoroform, a compound corresponding to chloroform.

HERBALISTS MAY NOT KEEP MEDICAMENTS IN STOCK.—David, a herbalist at Marseilles, was recently prosecuted for illegal practise of pharmacy, the specification being that he exposed for sale such pharmaceuticals as cantharides, whole and powdered, sugar of lead, potassium bromide, tincture of aconite, corrosive sublimate, &c. The defence was that none of the articles had actually been sold; but the court held that the goods, having been found among the usual stock of a herbalist, they were meant to be sold, and, besides, were kept in a way very liable to cause dangerous mistakes. The law which forbids all but qualified pharmacists preparing, retailing, or keeping medicinal preparations was plainly violated. The sentence was 500f. fine, and 5f. damages to the Marseilles pharmaceutical syndicate.

A LADY AT THE ACADEMY OF SCIENCES.—For the first time for years a lady was, last Monday, sitting among the academicians. The sight caused no little surprise; for if women have forced their way into the lecture-rooms at the Sorbonne, the schools of medicine and pharmacy, and even won by hard fight positions as hospital internes, the Academy of Sciences has remained obdurate, and refuses to admit ladies, as the Academy of Medicine does, to the seats reserved for the public. On this occasion the exception was in favour of Madame Halphen, the young and comely widow of the academician who died last year at the age of 44. M. Picard delivered an oration on the deceased member, after which the lady, who sat between her husband's father and younger brother, was gallantly escorted to the door by Perpetual Secretary Bertrand, while all the academicians stood up. The little ceremony shows that the learned body is not yet prepared to admit ladies to its sittings.

AMERICAN FROG IMPORTATION.—French and frog-eater were once synonymous terms, but they are so no longer now that Brother Jonathan beats the Gaul at his own batracian game, and the other day capped the climax by sending live frogs to the Paris markets. The ravenous habit is not new in America. As long ago as 1857 frogs' legs were freely offered in the New York markets, and no self-respecting restaurant failed to have on its bill of fare the delicacy, fried or fricasseed, at least on Fridays. And as regards both size and flavour, Americans always claimed great superiority for theirs over the French leaping game. Certain it is that those western bull-frogs, called "Missouri nightingales" after their sweet nocturnal melodies, are giants in comparison with the puny European croakers. To meet the increasing demand in America they have found it profitable to have frog farms, and the surplus production is shipped abroad, packed in wet moss. Some of the specimens received are said to be enormous.

GERMAN PHARMACEUTICAL NEWS.

(From our Berlin Correspondent.)

QUALIFIED ANALYSTS.—Some discussion is said to be going on in ministerial circles with regard to a "staats-examen" for analytical chemists who are to conduct analyses of foods. The Deutsche Chemiker Verein, which made an application at headquarters for details of the scheme, was told that no definite conclusion had yet been arrived at.

BORAX AS A PRESERVATIVE.—The German Government has forbidden contractors to supply the navy with preserved articles of food containing boric acid. This order is the result of the trial of a new preservative composed of equal parts of borax and salt, which has been sold as harmless. It was found that persons partaking of meat preserved with this agent experienced gastric derangements.

THE BLACK BOOK proposed by the Hamburg branch of the Chemists' Assistants' Society, for the names of proprietors whose service it was not considered desirable to enter, has failed to attract much support, and at a meeting of the section of the Society in Alsace-Lorraine a motion was carried regretting the action of the Hamburg branch in proposing such an arrangement.

MEDICAL COMPETITION is very keen here. Not long since there were nineteen vacancies open for surgeons to workmen's clubs, and no less than 150 medical men (10 per cent. of the whole number in this city) applied, some even—a majority of this number—considering it desirable to call personally on the committees of these clubs, which consist of twenty-five workmen.

A CHEMICAL INDUSTRY SOCIETY.—There are a number of chemical factories round about Heidelberg, some of those in the neighbouring towns of Mannheim and Ludwigshafen having a wide-spread fame. This congregation of businesses similar in nature, employing a large number of men who have interests in common, has suggested to Victor Meyer, the successor of Bunsen, the idea of establishing a chemical society in Heidelberg, so as to afford the technical chemists in the surrounding manufactories an opportunity of an interchange of ideas and experience by means of regular meetings, &c.

THE ENTERPRISING BURGLAR has broken new ground by "cracking the crib" of a hospital dispensary, and clearing out therefrom the contents of the poison-cupboard. The object of so strange a selection of "swag" is rather obscure. It may be that the explorer contemplated a research on the action of poisons on the common, or garden, species of the genus *Pellicia*, or, possibly, he was altogether ignorant of the nature of the chemicals he took, and concluded that their value must be proportionate to the care taken of them. In any case, he must have upon his hands (for he could scarcely have found a market for them) a pretty general stock of the most powerful medicines, and he is said to have thoughtfully taken also the "Compendium," or handbook, explaining the uses of the poisons. The public prosecutor gives notice of the theft, in the hope of embarrassing the present holder of the goods if he should try and dispose of his strange acquisitions.

POST-CARD COMPETITIONS (JANUARY AND FEBRUARY.)

THE LECTURE COMPETITION.

DURING the past three weeks we have been publishing a number of specimens of the outlines of lectures which we asked for in January. It will have been recognised that a great number of valuable suggestions were contributed, many of which will, we hope, bear fruit in the future, as so many of our previous competitions seem to have done, in the dissemination of information and the consequent development of business. There were a great many capital lectures suggested, and among them we found it exceptionally difficult to select the one most worthy of the prize. Some, otherwise excellent, lectures were ruled out on the ground that the proposed syllabus could not be got through in an hour; others we thought would be too expensive or too difficult to prepare. Bearing in mind that one of the principal objects of giving the lecture should be that of bringing results to the lecturer in his business, but without allowing this object to be too obvious, and also influenced by a preference for something a little out of the ordinary run, we came to the conclusion, after a careful perusal of all the cards sent in, to remit the guinea to Mr. C. Granville Wood, 30 High Street, Oldham, for his outline of lecture on the sick-room (page 294, March 1), and also to send half-a-guinea each to Mr. R. Fred. Reynolds, Wharfe Cottage, Shaw Lane, Headingley, Leeds ("Drinking Waters," page 256, February 22); Mr. C. C. Bell, Epworth ("Table Science, or Reason and the Roasting of Eggs," page 257, February 22); Mr. T. D. Wright, 33 Springfield Terrace, Lancaster ("Obtaining a Light," page 293, March 1); Mr. J. S. Clarke, 25 New Road, Spalding ("Hearing," page 295, March 1); and to Mr. R. H. Ludwig, Assistant to Mr. F. E. Johnson, Halesworth ("Photography," page 295).

THE PILL-MILL.

It is a little difficult for the modern chemist and druggist to realise that a few generations since pills occupied a comparatively minor position amongst the official and unofficial forms of medication. The pill has, doubtless, always been used in medicine; certainly its position is proverbial as the form in which the most bitter, nasty, or nauseous substances should be administered. Perhaps it was for that very reason that the apothecaries of last century seldom prescribed pills for their well-to-do patients; they reserved them for servants and poor people, and dosed the more fortunate ones with draughts and boluses, which were more easily swallowed, and possessed the commendable virtue of being more expensive.

In these latter days the order of things has been radically changed—high and low, rich and poor, prince and pauper reach a common level when they pass the portals of Esculapius and Galen. All have to contemplate the possibility of the pill. The march of civilisation seems to have effected this community of suffering. Hard work, fierce competition, and riotous living have engendered new disorders of the human system which call for speedy treatment and portable physic. And pharmacy, by introducing some improvements into the pill-mill, has made the popular pill a possibility. The days of the gilded pill are past. Such extravagance is reserved for the pedantic spendthrift. Sugar and chalk have worked a revolution, and a little more care on the part of the pharmacist has effected such a reduction in the size of the pill itself that the throat has capitulated to its concentrated horrors. So it has happened that in these last years of the nineteenth century the chemist and druggist has become more than ever a pill-maker, and pill-selling threatens to eclipse all his other functions.

The drug trade is well aware of this change. Now, since Cox, of Brighton, began to offer coated pills to the trade, this practice has gradually extended until pearl pill-coating is done in almost every pharmacy, and an important special industry has gradually been formed—the factory-made pill industry, to wit. The public has become so addicted to pill-taking that it is difficult for retailers to supply the demand, so that wholesale firms have found it necessary to start pill

departments, with steam-driven machinery and trained pill-makers. The consumption of proprietary pills has also increased enormously, this being due mainly to extensive advertising, a cheap newspaper press, and the possibility, therefore, of addressing all classes of the population upon the ills which flesh is heir to. There seems, in short, to have been a conspiracy of circumstances to make the pill-mill go. What may its total produce be?

This was the problem which we desired the trade to assist us in solving, and we have to acknowledge a very general response to our inquiry. We asked those who joined in this competition to give us an average estimate of the number of pills supplied to the inhabitants of the British Isles every day, the figures being based upon the number of pills sold in each of the 10,000 pharmacies in the kingdom during any one week of the month of February. Obviously, this is a very fair basis for calculation, but to come even nearer to correctness we asked competitors to include in their estimate what they thought doctors, grocers, stores, and other pill-sellers are likely to distribute daily. After going carefully through the post-cards which we received, we find that

5,643,961

is the number of pills which our subscribers estimated to be consumed in the British Isles daily. This is an astonishing number, but not, we believe, an exaggerated calculation, and those who manufacture pills in large quantities will agree that the estimate is very near the truth. One maker told us recently that he sells to one house in Scotland no less than 1,000 gross of Bland's pills at a time, and we understand that this supply is frequently repeated. The computation given by our subscribers provides for one pill per week to every man, woman, and child in the kingdom. Taking the average pill to weigh 3 grains (exclusive of coating), a year's supply would weigh 178 tons, or sufficient to fill a train of thirty-six ordinary railway waggons. It would take two powerful engines to haul this battery of latent force. If the pills were placed close together they would stretch out to a distance of nearly 6,500 miles—would, in short, make the journey from Liverpool to New York and back again. Such are some of the outcomes of this interesting competition. One of its conditions was that we should give a guinea to the competitor who sent in a number nearest to the average, and we have pleasure in awarding this to Mr. Harold Keene, care of Mr. G. E. Bridge, The Firs Pharmacy, Bournemouth, whose estimate was 5,648,000.

NEW COMPANIES.

DENAAYER'S PEPTONIDS AND EXTRACT OF MEAT.—Capital, 200,000*l.* in 10*l.* shares, of which 19,000 shall be A shares and 1,000 B shares. This is a reconstruction of Denaayer's Peptones Company (Limited), which was incorporated in June, 1858, with a capital of 10,000*l.*, in 10*l.* shares, purchasing from Alphonse Florent Denaayer, of Brussels, the sole and exclusive right to use and work certain processes for the sum of 40,000*l.* as a floating charge on the undertaking of the company. The returns of October 8, 1888, and June 25, 1889, respectively, record the issue of the total number of shares upon which calls to the amount of 70*l.* had been received, and 993 shares were agreed to be considered as paid up. The resolution for reconstruction was confirmed on January 13, 1890. Borrowing limit, 20,000*l.*

PHOSPHORUS COMPANY.—This company has been formed to manufacture phosphorus and chemical products in general, and carry on any other trade, business, or manufacture auxiliary thereto, adopting therefore a provisional agreement of February 6, 1890, made with Frederiek Walton, relating to the sale of certain letters patent, respectively numbered 14,962 and 17,719, and other English, foreign, and colonial patents, upon terms and conditions the particulars of which are not scheduled with the articles of association. Capital, 150,000*l.*, in 10*l.* shares, of which 7,500 are 7 per cent. cumulative preferential shares, with right to division of surplus profits beyond 7 per cent. *pro rata* with holders of ordinary shares. First directors (three to six):—Sir Henry Mance, George Dibley, John Cunningham, Colonel C. Mure-Steel, Leonard Balfour Burns, and George Readman. Borrowing limit, 50,000*l.*

ANALYSTS' NOTES.

THE last number of the *Analyst* contains several items which are of direct interest to chemists and druggists, but not yet has the Society which controls the journal taken the opportunity to bring before its members, through their organ, any record of the tincture of rhubarb case which was unsuccessfully prosecuted in the early part of the year, and which was due in part to the erroneous information given in a paper published in the *Analyst*. The analysts are very careful in looking after the work of their pharmaceutical brethren. Thus, in a paper on

A RAPID METHOD OF ESTIMATING QUININE IN MEDICINE

(which title, by the way, is peculiar, for surely a thing containing quinine must be medicine), Dr. Seaton and Mr. H. Droop Richmond tell their fellow analysts how to go about the catching of the druggist. The formula is, first, an inspector properly appointed; second, a physician's prescription in writing, for the purpose of obtaining a sample of medicine for analysis. The analyst, in concocting a prescription, must have regard not only to the suitability of the drug—simple or combined, from the analytical point of view—but to its exhibition in forms or doses usually prescribed by English practitioners in medicines. Lastly, there is the innocent man who is to supply the medicine, a third of which will form the analyst's sample. The authors are kind enough to give us an example of what they mean—"a not uncommon prescription," they say, "for a quinine mixture"—:-

Quinine sulphatis	..	..	..	gr. xij.
Acid. sulph. dil.	..	..	..	℥xx.
Aque destillata	..	..	..	℥viij.

Dispensers will know this when they see it again; and in connection therewith it is as well to note that analysts regard *too much* as adulteration as well as *too little*. We have little sympathy with inaccurate dispensing; it is the pharmacist's most onerous and most pleasurable work, and should always be carried out with due regard to the patient's interests and the physician's intentions, and, sometimes, the analyst's vigilance.

Dr. Seaton and Mr. Richmond give a method of estimating the quinine in such a mixture as the above. It is this:—

"To 25 c.c. of medicine add 2 drops of methyl orange (25 grm. in 1 litre of water) and 2 drops of phenolphthalein (5 grm. in 1 litre of 50-per-cent. alcohol), titrate with $\frac{n}{10}$ baryta solution until the free acid is all neutralised, which is shown by the red colour just changing to a brown. Note the number of c.c. used. Continue titration until the pink colour of the phenolphthalein appears. Care must be taken not to overstep this last point, as the colour does not develop quite immediately. The difference between the two titrations, multiplied by the factor .0218, gives the weight of the quinine sulphate (i.e., the 7-molecule of water hydrate) in grms. in the 25 c.c. The number of c.c. in the medicine prescribed is known, and the calculation becomes a simple proportion sum. The method is, of course, not applicable in the presence of salts, of which the base is precipitated by baryta."

This is not recommended in preference to Allen's ammonia and ether gravimetric method, but the latter is tedious and "necessitates the use of an expensive reagent, viz., ether," so the authors recommend their plan as a preliminary way. Their results show that it is reliable, but we protest against that hyper-economical spirit which objects to the use of a few pence worth of ether when the reputation and interests of citizens are at stake.

METHYLATED SWEET SPIRIT OF NITRE.

There is a great deal of this about at present, Dr. John Muter tells us. "From what I have seen," he remarks, "the regularly licensed chemists and druggists do not patronise the makers of the article to any great extent, but it chiefly finds its way to cutting stores and oilmen, who undersell the pharmacist in all his articles not included in the poisons schedule. There ought to be introduced into

the next B.P. some simple method whereby the stuff can be readily found out in a few moments. An entirely reliable test is to put some of the sample into a glass, with a lump of solid caustic potash (about the size of a small bean), and stir till nearly dissolved. Spirit made from rectified spirit will lose all its odour of nitrous ether, and, after standing for half an hour, will not have become darker than the very palest tint of straw-colour (not visible by gas-light), and it will then only have the odour of plain rectified spirit. The methylated article, on the other hand, will become of a dark colour, varying from deep yellow to orange red, and will give off the well-known odour of methylated spirit in all its nakedness." This test of Dr. Muter's is at least simple, although our experience is that saponification of the spirit does not render it wholly inodorous, because there are odorous bodies in sweet spirit of nitre—paraldehyde, for example—which are not attacked by the alkali. However, the odour of naphtha is more powerful than it. The Dutch Pharmacopœia test is a good one. In this 5 c.c. of the spirit are mixed with 10 c.c. of ammonia, and to this are added 2 c.c. of a solution of iodine 1 part, and potassium iodide 2 parts, in 17 of water. After the black precipitate which is formed is dissolved, a further addition of 2 c.c. of the iodine solution should not, in half an hour, cause the separation of iodoform crystals.

COTTON-SEED OIL IN LARD.

Mr. Frank P. Perkins finds in testing lard that if about .02 to .03 gramme of powdered potassium dichromate be mixed with a few drops of concentrated sulphuric acid in a porcelain dish, and about .5 gramme of the lard be then introduced, on stirring well a second time, adding water, and stirring again, there will in the presence of cotton-seed oil be a green colour developed, due to the change of chromic acid to chromic oxide, but if the vegetable oil be absent the yellow colour of the dichromate will still prevail. The colour should not be judged until water has been added, and the mixture stirred for some seconds.

NOTES FROM KEW.

INDIAN YELLOW, OR PURREE.

IN the March issue of the "Bulletin" interesting particulars are given regarding the origin and composition of Purree. There has always been some doubt about it. It was believed to be the urinary sediment of the camel or buffalo, after the animal had fed on decayed and yellow mango leaves, but nobody was quite sure. Dr. Hugo Müller made some inquiries at Kew in 1883, and the Kew authorities set the India Office to work, with the result that an official of the Revenue and Agricultural Department of the Government of India proceeded to Monghyr, a town in Bengal, to see how it was obtained. There is a purree—or, more correctly, "piuri"—of mineral origin imported from London; this, of course, differs materially from the genuine article. The official found that the latter is really obtained from the urine of cows kept by a sect of gnalas, or milkmen, residing in a suburb of Monghyr, who are the only people who manufacture the purree. They feed the cows solely with mango leaves and water, which increases the bile pigment and imparts to the urine a bright yellow colour. The cows are made to pass urine three or four times a day by having the urinary organ rubbed with the hand, and they become so habituated to this that they cannot urinate unless this is done. The urine is collected, and at night heated in earthen vessels, whereby the yellow principle is precipitated. It is collected, made into balls, and dried first over a charcoal fire and then in the sun. The price paid to the manufacturers of the article is 1s. 8d. per lb. A cow yields about 2 oz. per day, this quantity being the product of 3 quarts of urine.

The chemical composition of "piuri" has been ascertained by Professor Græbe to be 51 per cent. of euxanthinic acid ($C_{16}H_{16}O_{11}$), magnesium 4.2 per cent., calcium 3.4 per cent., silica and alumina 1.5 per cent., water and volatile substances 39 per cent. In a previous issue (*C. & D.* p. 213), the mode by which Indian yellow is prepared for artists has been explained. Professor Græbe gives a similar explanation, and

proceeds to throw out some suggestions as to the probable origin or colouring matter in the animal's system. He advances satisfactory reasons for believing that the euxanthic acid exists in the "piuri" as a magnesium salt, and states that, although the free acid has a pale colour and its salts are also yellowish, it is the magnesium salt which is most remarkable for its fine yellow colour. The acid splits up into glycuronic acid ($C_6H_{10}O_7$) and euxanthone ($C_{11}H_{10}O_4$) when treated with weak acids. When euxanthone is given to dogs or rabbits, which have previously got such bodies as camphor or chloral, it appears in the urine as euxanthic acid. This is because the aromatic bodies induce the elimination of glycuronic acid, and the euxanthone uniting with this, euxanthic acid is the result. Hence the inference that mango leaves contain euxanthone.

BARILLA.

It would appear that, in spite of nearly a century of Leblanc soda and a decade or more of the ammonia-produced alkali, there are people in the world who still prefer to use the old-fashioned carbonate of soda or barilla, which was made years ago in Spain from various species of *Salsola*. It still is made in Alicante, but only to the extent of 200 to 250 tons per annum. The Kew authorities thought the natives of India might take up the industry, and with a prodigal disregard of the cheapness of the manufactured alkali, they in 1884 brought the matter under the notice of the Foreign and India Offices. The latter replied through Dr. George Watt, in August 1885, and now the information is published to the world at large. Perhaps there were good reasons for delaying the publication of the communication until now. Dr. Watt tells us that barilla—Khár-sajji it is now called in India—is manufactured in the Punjab in a very similar way to what it is in Spain. 8,000 to 10,000 maunds of it are manufactured in Shahpur every year, and the price has risen since 1865. In fact, there is no evidence that the introduction of Leblanc soda has injuriously affected the barilla trade. In Sind the alkali is also manufactured, and we also learn that less than half a ton of manufactured soda is imported annually, barilla being preferred. This is made from *Salsola* plants grown in the vicinity, and the alkali made from it is produced in cakes 18 inches in diameter and about 8 inches thick.

Practical Notes and Formulae.

SUGAR-COATING PILLS.

HECKER'S method is as follows:—The dried pills, after being moistened with a little syrup in a saucer, are placed upon a sheet of paper covered with a thin layer of powdered sugar, where they are rolled about by the hand until completely enveloped. The whole are then gently shaken upon a hair-sieve to remove the excess of powder, after which the pills are dried without the application of heat, which would cause their surface to crack. A single coating is quite sufficient in most cases, but the process may be repeated once or twice after the first drying. Pills coated in this way are not so beautifully smooth and glossy as those turned out by machinery, but they are very white and round, and, after a little practice, can be prepared offhand.

TYPE-WRITER INK.

PROF. E. B. SHUTTLEWORTH recommends castor oil as a solvent of the aniline colours for making type-writer ink. He says that on the small scale the incorporation and solution of the aniline colour in the oil may be accomplished by triturating the previously powdered colour with the oil in a mortar. The use of a little alcohol will sometimes be found to facilitate this operation. This process he has communicated to the *Scientific American*, and in the *Canadian Pharmaceutical Journal* he says that such inks may be put to other purposes. One of these is the preparation of printing-ink for railway and other commercial forms which require an ink which will copy with the written portion. The colour may be ground in castor oil in the same manner as the pigments ordinarily employed in varnish. Druggists could also in like manner produce an ink for use on stamping-pads.

This would not dry up or become sticky, like the compounds containing gelatine, glycerine, gum, sugar, &c., and, if too thick, could easily be made of the proper consistence by the use of a few drops of strong alcohol.

LABEL VARNISH.

	Parts
Sandarac	53
Mastic	22
Camphor	1
Lavender oil	8
Venice turpentine	4
Ether	6
Alcohol	40

All by weight.

Macerate the ingredients for several weeks until fully dissolved. The result is a limpid, colourless, brilliant varnish, which dries quickly and is not too brittle.—*Arch. de Pharm.*

A GOOD TOOTH-PASTE.

MR. O. P. MEHLFRIEDEL, of New York, informs the *Western Druggist* that, after trying every possible formula to obtain a good tooth-paste, he found the following, his own combination, a very suitable one:—

Calcium carbonate, precipitated	1½ oz.
Sugar	1 "
Potassium biphosphate	½ drachm

Make them into a paste with

Glycerine	2 "
Rose water	2 "

and add this to the following solution, effected by heat—

Castile soap, white (or good glycerine soap) 4 drachms	
Alcohol	1 oz.
Rose water	½ "

And finally, after cooling, add

Oil of peppermint	60 drops
Carmine, dissolved in ammonia	30 gr.

FOR CHAPPED HANDS.

THE following application is said to be an excellent one, especially for those who have their hands much in water:—

Menthol	12 grains
Salol	13 "
Olive oil	20 drops
Lanoline ointment	1 oz.

Rub the menthol with the salol and the olive oil, then mix in the lanoline.

This ointment has a wonderful effect in relieving smarting; it softens the skin and causes the fissures to heal rapidly. It may be rubbed on the hands twice a day or oftener.

PURGATIVE CHOCOLATE.

GIRAUD, a French pharmacist, speaks well of a preparation made as follows:—

Cacao (powdered and freed from oil) ..	50 grm.
Sugar (powdered)	100 "
Castor oil	60 "
Essence of vanilla	q.s.

Make into tablets.

The oil should be incorporated with the cacao, and the sugar and vanilla added. The ingredients must be well worked up upon a heated slab, and allowed to cool in moulds.

ALMOND LOTION.

Bitter almonds, blanched	4 oz.
Orange-flower water	12 "
Chud soap	½ "
Rectified spirit	4 "
Essential oil of almonds	20 drops
Oil of bergamot	1 drachm

Dissolve the soap in a water-bath with the orange flower water, beat up the almonds in a clean mortar, gradually adding the soap and water, strain through a clean washed muslin strainer and return to the mortar, and while stirring gradually add the spirit in which the oils have been dissolved.

—Registered Pharmacist.

Trade Report.

Notice to Retail Buyers.—It should be remembered that the quotations in this section are invariably the lowest net cash prices actually paid for large quantities in bulk. In many cases allowances have to be added before ordinary prices can be ascertained. Frequently goods must be picked and sorted to suit the demands of the retail trade, causing much labour and the accumulation of rejections, not all of which are suitable, even for manufacturing purposes.

It should also be recollected that for many articles the range of quality is very wide.

42 CANNON STREET, E.O., March 13

THE principal feature of our drug and chemical markets this week has been an absence of violent price-fluctuations and a steady trade in a large number of articles. Among chemicals there are signs of a decided revival in citric and tartaric acids, which have long been neglected, and for which the principal season of consumption is now approaching. Cream of tartar is also several shillings dearer. Oxalic and acetic acids are firmer in tone, and the salts of silver are following the upward course of the metal. A fresh advance has occurred in refined camphor. Glycerine is also somewhat firmer again, but sulphate of copper and antimony give signs of weakness, and quinine is distinctly lower. Chlorate of potash commands somewhat higher rates, and the recent advances in permanganate and acetate of lead are fully maintained. In drugs we have to report a slight decline in cinchona bark, a quiet but steady market for opium, and somewhat easier rates for Canada and copiba balsams, golden seal root, menthol, and oil of cloves. On the other hand, the following articles are either very firm or quotably dearer—ambergris, raw camphor, Peru and to'u balsams, spermaceti, castor oil, insect flowers, saffron, beeswax, and cod-liver oil. As regards the outside markets, shellac is irregular of sale, lower for fine orange, but rather dearer for garnet; turmeric and cutch are dearer and in demand; Gambier slightly easier. Kowrie and olibanum gums remain firm, and Zanzibar animi at to-day's auctions maintained the advance established in the private market. Soda crystals are worth less money, but caustic is dearer, and bleaching-powder shows a firm market. Zanzibar cloves, mace, new Jamaica ginger, black and white pepper are easier, and so is rape oil; but higher rates are quoted for turpentine, linseed oil, and cocoanut oil.

ACIDS.—*Acetic*: A further rise in the convention prices is anticipated. *Citric* has advanced fully $\frac{1}{2}$ d. during the week, and we hear that business has been done to-day at 1s. 3 $\frac{1}{2}$ d., though yesterday 1s. 3d. would still have bought. 1s. 3 $\frac{1}{2}$ d. is now generally asked. *Oxalic*: also dearer, and not obtainable now under 1s. 3 $\frac{1}{2}$ d. *Tartaric*: declined early in the week, and sales were then made as low as 1s. 1 $\frac{3}{4}$ d., cash terms, for foreign. During the last two days, however, there has been a very strong demand, and the market closes decidedly dearer, English, at 1s. 3d.; foreign, at 1s. 2 $\frac{1}{2}$ d. on the spot.

ALOES.—Reports from New York state that the heavy quantities of common *Curaçao* aloes which have depressed the market there lately have been purchased for consumption. There is only a very slight indication of any improvement in value, however.

AMBERGRIS.—There has been an arrival this week of about 30 oz. of fine grey ambergris, which came here *via* America. Part of it has already been sold at an extremely high price, and the rest, we believe, is going to France. There is some more offering from abroad at about 180s. to 185s. per oz.

ANTIMONY.—Prices are declining, but it is difficult to give close quotations. The latest price which we heard mentioned for crude *Japanese* was 50l., and for distant arrival lower prices were named.

AMMONIA SALTS.—*Carbonate* dull, at 3 $\frac{1}{2}$ d. to 3 $\frac{1}{4}$ d. *Sal ammoniac*: firm and in good enquiry; first quality crystals at 37s.; seconds at 35s. *Sulphate* dull and unchanged;

Beckton 11l. 12s. 6d.; London, 24-per-cent., grey, 11l. 16s. 3d. to 11l. 17s. 6d.; Hull and Leith, 11l. 15s.

ARSENIC maintains its recent advance, best white powder, 13s. 9d. net landed.

BALSAMS.—*Canada* balsam is neglected and prices are rather easier at 1s. 3 $\frac{1}{2}$ d. to 1s. 5 $\frac{1}{2}$ d. c.i.f. terms, according to quality and packing. *Copaiba*: In New York there is an easier tone for Maranhão balsam, which is coming forward in rather larger quantities, and further shipments are thought to be on the way. Carthagena and Angostura balsams are also offered more freely. The prices now asked range from 2s. 7d. to 2s. 9d. c.i.f. for the best grades. *Peru*: The Continental speculators who have lately taken this article in hand again have bought largely in New York, and the price has advanced there to 4s. c.i.f. terms. *Tolu*, which had fallen to a very low figure, has also attracted the attention of French and German operators, who have taken about 150 packages out of the American market. The price from New York still comes at 1s. 3d. to 1s. 3 $\frac{1}{2}$ d. per lb. e.i.f., but there is every prospect of an early improvement.

BENZOL.—Dull and easier to buy. 90-per-cent. at 3s. 6d., 50-per-cent. 2s. 7d. to 2s. 8d.

BORAX—Steady but unchanged, from the second-hand refined may be bought at 28s. 6d.

CAMPHOR (CRUDE).—Since our last report there have been several transactions in raw Japan camphor, shortly due and for early arrival at 195s. per cwt. c.i.f. terms, which showed a slightly easier tendency; but to-day the price has again hardened, and we have to report a transaction of 200 pieuls, ship named, at 10l. c.i.f. Hamburg. A few days ago a small parcel is also said to have been sold at 10l. 2s. 6d. c.i.f. London; and we hear of some business on the spot at 10l. 10s., though we have not been able to confirm that statement. The 50 tubs bought in at the last drug auctions have since, we believe, been sold. From America the reports are also exceedingly firm. It is said that the average yearly consumption in the States during the last four years has been 2,100,000 lbs., while imports of crude camphor for the year ending February 10 show a decline of 1,200,000 lbs. as compared with the preceding year.

CAMPHOR (REFINED).—We have to report a fresh advance this week. Two of the English refiners a few days ago put up their quotations from 2s. 5d. to 2s. 7d., and one to 2s. 8d. per lb. To-day they have all advanced to the 2s. 8d. limit. We doubt whether it would be possible to buy at 2s. 5d. per lb. from the second-hand.

CANTHARIDES.—*Russian*, firm at the price last quoted. *Chinese* flies are reported to have changed hands lately at better prices, viz., 1s. 1d. per lb.

CARDAMOMS.—We understand that there have been a few sales since the last auctions of medium grade cardamoms at a slight decline on the prices paid at the sales.

CASCARA SAGRADA.—The market shows no alteration in value, and good thin bark offers at the rate of 60s. to 62s. 6d. per cwt. c.i.f. from the States, while thick bark may be had 5s. below that price. It is said that there is some anxiety among the holders at the absence of the expected boom.

CASCARILLA.—We have received a consignment of about 15 tons *via* Holland since our last report.

CHAMOMILES.—A better demand is reported for this article, which has been neglected for some time. Good Belgian flowers are quoted at 37s. 6d. to 38s. per cwt.

CINCHONA.—Among other arrivals this week we notice a particularly large consignment of bark direct from Java: it consists of 689 packages per *Merhara*, which we believe is one of the largest consignments ever received direct from Java. The public auctions on Tuesday comprised the following quantities:—

	Packages	Packages
Ceylon bark ..	763 of which	586 were sold
East Indian bark ..	1,219 "	753 "
Java bark ..	228 "	201 "
South American bark	1,163 "	33 "
Total ..	3,375 "	1,571 "

The bulk of the auctions as regards actual value, and

rather more than one third of the number of packages offered, again consisted of East Indian barks. *Succirubra* barks were particularly well represented, and of this class there was a fair choice of chips and shavings of fine appearance. About half of the American barks consisted of old *Cuprea* and soft Colombian bark which has been offered countless times before. The auctions were characterised by a somewhat dull tone, partly caused by the knowledge that a very heavy quantity of Java bark is about to be offered for sale in Amsterdam. There was only a moderate competition, and a large proportion of the supply was bought in, as the limits could not be realised. A slight fall of about 5 per cent. in the unit value on bark of average richness was established, and the unit may now be placed at $1\frac{1}{2}d.$ to $1\frac{3}{4}d.$ per lb.

The following particulars indicate the unit value realised by a few parcels:—

	Percent. equiva- lent of quinine sulphate	Price per lb.
3,900 lbs. East Indian officialis, original chips	1.93	3d.-3½d.
3,420 " " succirubra, renewed "	2.21	3½d.-4d.
980 " " officialis, original "	1.93	4d.
7,080 " Ceylon " renewed "	3.91	6½d.-7d.
1,210 " " " orig. shavings	3.57	7d.
4,700 " " succirubra " "	1.73	2½d.
7,230 " " " renewed " "	1.57	2½d.
5,630 " " " chips " "	2.41	4d.
9,610 " Java ledger, original " "	3.16	5½d.-6d.
13,000 " Ceylon succirubra, original shavings	1.68	3l. refused
20,820 " " " renewed " "	3.15	5½d. "
1,150 " East Indian ledger, original chips	6.32	10½d. "

The following are the approximate quantities purchased by the principal buyers:—

	Lbs.
Agents for the Mannheim and Amsterdam works..	73,601
" the Auerbach factory	70,769
" the Frankfort O/M. and Stuttgart works ..	64,049
" the American, French, and Italian works ..	54,146
" the Brunswick factory	42,814
Messrs. Howards & Sons	23,293
Mr. Thos. Whiffen	12,420
Sundry druggists	17,080
Total quantity sold	363,175
Bought in or withdrawn	275,831
Total amount of bark catalogued	639,036

It should be well understood that the mere weight of bark purchased affords no guide whatever to the quinine yield represented by it, firms who buy a small quantity of bark by weight frequently taking the richest lots, and *vice versa*. An analysis of the catalogues gives the following prices for sound bark:—

CEYLON BARK.—*Original*—Red varieties: Small and weak chips, $2d.$ to $2\frac{1}{2}d.$; fair bright and bold mixed with broken quill, $3d.$ to $5\frac{1}{2}d.$; good bright chips and shavings mixed, $2\frac{1}{2}d.$ to $4\frac{1}{2}d.$; fair branchy stem chips and shavings, $3d.$ to $3\frac{1}{2}d.$; several parcels of more or less dusty to bold root, $2\frac{1}{2}d.$ to $4\frac{1}{2}d.$ per lb. Yellow varieties: Dull and dusty stem chips, $3\frac{1}{2}d.$; fine strong quilly chips, $7d.$; good spoke shavings, $5d.$; good rich root, $8d.$ to $10d.$ per lb. Grey varieties: Fair spoke shavings, $3\frac{1}{2}d.$ to $4d.$; fine bright quilly ditto, $7d.$; fair branchy chips, $3d.$ to $5\frac{1}{2}d.$ per lb. Hybrid: dull, weak branch chips, $2\frac{1}{2}d.$; fine ditto, $8d.$ per lb. *Renewed*—Red varieties: Dusty siftings and weak chips, $4d.$; fair stem chips, $4d.$ to $4\frac{1}{2}d.$; good strong quilly chips, $7\frac{1}{2}d.$; dull shavings mixed with chips, $2\frac{1}{2}d.$; good but dusty spoke shavings, $6d.$ to $7d.$ per lb. Yellow varieties: Small and dusty chips, $9\frac{1}{2}d.$; fine bold chips, $11\frac{1}{2}d.$ to $12d.$ per lb. (the highest price paid for any parcel in sale); bold grey chips, $4\frac{1}{2}d.$; fair to good ditto spoke shavings, $3\frac{1}{2}d.$ to $7d.$ per lb.

EAST INDIAN BARK.—*Original*—Red varieties: A large quantity of chips, fair dusty to good bold quilly mixed, $2\frac{1}{2}d.$ to $4d.$; chips and shavings of good appearance mixed with silvery quilly pieces, $3\frac{1}{2}d.$ to $4d.$; dull to fine bright quilly shavings, $2d.$ to $4d.$; fine bold quilly shavings, $7d.$ per lb. Yellow varieties: Small weak twigs, $3\frac{1}{2}d.$; bright but very woody chips, $3d.$ to $5\frac{1}{2}d.$; fine bold quilly chips, $8d.$ to $8\frac{1}{2}d.$; weak to good branchy shavings, $4d.$ to $6\frac{1}{2}d.$; dull and weak quills, $5\frac{1}{2}d.$; root, $9d.$ per lb. Grey varieties: Fair branchy

chips, $3d.$ to $4\frac{1}{2}d.$; dark and very small shavings, $2d.$ to $2\frac{1}{2}d.$; fair to good quilly shavings, $2\frac{1}{2}d.$ to $6\frac{1}{2}d.$; dull and dusty root, $6d.$ to $7d.$ per lb. *Renewed*—Red varieties: A large quantity of dull to good bright quilly branch and stem chips, $2\frac{1}{2}d.$ to $5d.$; fine bold stem chips, $5\frac{1}{2}d.$ to $6\frac{1}{2}d.$; dark to bright branchy shavings, $4d.$ to $6\frac{1}{2}d.$; fine but dusty stem chips, $6d.$ to $6\frac{1}{2}d.$ Grey: Dull small to branchy chips, $5d.$ to $6d.$; fair small shavings, $5d.$ per lb.

JAVA BARK.—*Original*: Ledger, small but rich chips, $5\frac{1}{2}d.$ to $9\frac{1}{2}d.$; common to fair but dusty root, $4\frac{1}{2}d.$ to $6d.$ *Renewed*: Weak Ledger chips, $4d.$ to $5\frac{1}{2}d.$ per lb.

SOUTH AMERICAN BARK.—Only 33 packages (=3,510 lbs.) of cultivated Bolivian *Calisaya* bark were sold, at from $6d.$ to $7d.$ for weak and very broken, and $9\frac{1}{2}d.$ to $10\frac{1}{2}d.$ for good fairly bold druggists' quills. For 70 bales of old *Soft Colombian* bark $3\frac{1}{2}d.$ is required, while 515 packages *Cuprea*, of old import, were also bought in, several offers of $2d.$ to $3\frac{1}{2}d.$ per lb. being refused.

The exports of cinchona from Ceylon during the first half of the season (October 1 to February 28) have been as follows:—1889-90, 3,453,000 lbs.; 1888-89, 5,141,711 lbs.; 1887-8, 3,788,388 lbs.; 1886-7, 6,524,972 lbs.; 1885-6, 6,019,829 lbs. The arrivals by rail at Colombo during the same period were only 920 tons in 1889-90, as against 1,885 tons in 1888-9. Our imports of cinchona since the last report have been 2,513 packages from all quarters.

CLOVES—A report issued by a well-known Rotterdam firm on the position of cloves has attracted some attention during the week. The following are the salient features:—"Zanzibar reports, under date February 2 last, state that the total crop this season is by far the largest on record, and is estimated at 800,000 frazileh, or about the double yield of former abundant crops. A frazileh is equal to 35 lbs., and the total yield, therefore, will be about 28,000,000 lbs., while the average requirements of the whole world are estimated at only just over 11,000,000 lbs. Prior to 1871 the price of fair Zanzibar cloves in London averaged from $3\frac{1}{2}d.$ to $3\frac{3}{4}d.$ per lb., and, although since then an export duty of 15 per cent. of the value has been established, the difference between the prices mentioned and the actual quotation of, say, $4\frac{1}{4}d.$ to $4\frac{1}{2}d.$ is much larger. The large yield is undoubtedly a consequence of the replanting which has been going on in Zanzibar after the hurricane in 1872, the trees having now attained their full growth. The fact that the tree bears fruit every second year only leads to the supposition that the next crop will be a small one, but it is said that a much larger number of trees has been planted since the hurricane than ever existed before. At any rate, the current crop is much in excess of the requirements, and concurrently with this exceptional Zanzibar crop the yield of cloves in the island of Amboina (Netherlands Indies), though of much less importance commercially than Zanzibar, has also been greatly in excess of the average." In reply to these alarming statements, it is said that no European house can possibly have any means of correctly estimating the crop of Zanzibar cloves, as the bulk of this article is produced on the small island of Pemba, north of Zanzibar, which is entirely in the hands of the natives, who do not allow any foreign traders to obtain accurate news of the crop; but the estimate given by the Dutch firm is thought to be much exaggerated. Meanwhile it is a fact that our market continues to decline, and Zanzibar cloves on the spot have fallen from $4\frac{1}{2}d.$ to $4\frac{1}{4}d.$ per lb., and for arrival from $4\frac{7}{10}d.$ to $4\frac{5}{10}d.$ To-day, however, sales for April-May shipment are reported at $4\frac{3}{4}d.$ c.i.f.

COCA LEAVES.—The recent heavy arrivals in New York are being absorbed satisfactorily by consumers, and the news of an advance in South America has stimulated the market. The quotations are 1s. 1d. to 1s. 2d. per lb. c.i.f. for dark green *Huanoco*, and 9d. to 10d. c.i.f. for light *Trurillo* leaves. *Cocaine* is also quoted somewhat higher.

COPPER (SULPHATE).—Lower, and obtainable at 25s. 6d. on the spot. For forward delivery June-July 22s. would be accepted. At the same time purchasers complain that they cannot get delivery for what they have bought at present.

CREAM OF TARTAR.—In strong demand, and much dearer. Best white crystals, 108s. nearest price; powder, 110s. 6d. For forward delivery full prices are also asked.

CUTCH.—The market is very firm and there is an excellent

inquiry both in London and Liverpool, especially for the better brands. *Star B.* has been in particularly good request with considerable business at 31s. on the spot, and 31s. to 31s. 6d. for delivery. *Eagle* brand has been sold at 30s. for March-April. The stock of common qualities is large, and these are very neglected.

DAMIANA LEAVES are now being offered at 6d. to 6½d. per lb. c.i.f. from New York for best green quality. They have never been so cheap before.

ERGOT OF RYE.—Firm. We hear that some Russian ergot has been sold at 1s. 2d. per lb. c.i.f. for a parcel now due.

GALLS.—*Chinese galls* very quiet, spot price is nominal at 72s. 6d. to 74s. for usual shape and quality, and 69s. for plum-shaped galls; *Turkey galls* are also quiet, with a slight business in good blues at 57s. 6d. to 60s. per cwt.

GAMBIER.—A small business is reported on the spot at 27s., which shows a slightly easier market. March-April has been done at 27s., and January-February at 27s. 3d.

GLYCERINE.—The makers have now all fixed their price at 70s. for double distilled German 1260. There is very little offering in the second-hand below this price.

GOLDEN SEAL ROOT is being pressed for sale in America, and is finding buyers at the reduced rates of 1s. 3d. to 1s. 4d. c.i.f.

GUM ANIMI.—*Zanzibar* sold at some slight advance on the last auctions, but not any dearer than has recently been done privately, ordinary red to fair pale ambery sorts, 9d. 15s. to 11d. 10s., common to good pale bean and pea, 95s. to 127s. 6d., red pickings, 62s. 6d. to 72s. 6d. There were also small sales of *Madagascar animi*, roughish red to ordinary pale sorts, 135s. to 117s. 6d. per cwt.

GUM ARABIC.—We do not hear of any transactions worth mentioning this week.

GUM COPAL.—Dull of sale, dark to good pinky Manilla, 33s. 6d. to 50s.

GUM DAMAR.—Nearly all bought in, with small sales of fine *Singapore*, at 57s. 6d.

GUM KOWRIE.—The small supply of 846 cases offered at auction to-day met with a good demand, and about two-thirds were sold at firm prices, common rough to soft, 29s. to 35s.; fair to good hard, partly scraped, 52s. to 67s.; brown and amber, 72s. to 84s.; good amber, up to 5d. 2s. 6d.; fine to superior selected pale, 7d. to 12d. 2s. 6d.; common dark to fine chips, 29s. to 68s.; dust, 16s. 6d. to 39s. 6d.

GUM THUS.—The news from New York is of lower prices, as the new crop has come to hand in quantity. The next crop will not be gathered until late in the year. The quotation for good soft white quality is 12s. 6d. per cwt. c.i.f.

GUM TRAGACANTH.—For the public auctions to be held to-morrow 1,394 packages have been declared, of which 384 packages are hog gum.

HONEY.—The demand for medium and good honeys remains very brisk, and full prices are readily paid. Californian honey is offered at 40s. to 45s. c.i.f. for amber, and 46s. 6d. for pale clear.

INDIGO.—For the next periodical auctions of East Indian indigo, which will commence on April 14, 9,750 chests have been declared already.

INSECT FLOWERS.—Considerable transactions are reported from Trieste. It is said that some American buyers have given their orders now. The prices are still low, but there is every indication that they will rise further. Open flowers have already advanced about 10s. per cwt., and the quotations now are: Open flowers, 85s., c.i.f.; half-closed, 95s., c.i.f.; and closed flowers, 110s., c.i.f.

IODINE and its salts unchanged and nominal.

JALAP.—There is very little offering here, but for fair quality up to 1s. per lb. is asked, though we do not think that price will be obtainable just yet. Reports from Hamburg to-day come dearer, and from America the news is that the new crop is likely to be much below the average in quantity. The new jalap is now arriving from Mexico, and prices are well maintained. The quality is not said to be

very good, and the quotation is 10½d. to 11d. for sound *Vern Cruz*.

MARSHMALLOW ROOT.—The prices on the Continent are advancing daily, the small crop having been almost all disposed of.

MUSK.—It is reported that some 3 or 4 caddies of first pile *Tonquin* pods, thin blue skin, &c., ex last sale, have since found buyers at 85s., a price which was not obtainable at the auctions.

NUX VOMICA.—Three shipments, together 462 packages, have come to hand since our last report. The last price which we have heard mentioned here for good silky seed is 11s. 6d. per cwt.

OIL (CASTOR).—There is no change in London. In Liverpool the market is rather firmer, and small sales have been made of good Calcutta seconds at 3¼d. per lb. For arrival there is but little offering. Calcutta reports, dated February 18, state that the market is firmer, and slightly higher for both oil and seed. The stock and arrivals of the latter remain exceedingly limited, and the production of oil is not sufficient even for the local requirements.

OIL (COD-LIVER).—The favourable reports from Norway continue, but notwithstanding this prices are said to be tending a little higher, 62s., c.i.f., being asked for fine non-freezing new. Our stocks of old oil are said to be rapidly clearing off, large quantities being sold to soap-makers, and for other industrial purposes.

OILS (ESSENTIAL).—*Star anise* quiet at 6s. 1½d. to 6s. 2d. per lb. Some oil of very fine quality, exported direct from Tonquin by the French contractor who has secured the monopoly of the production, is now being offered at a slightly higher price than the Chinese oil. *Cassia* oil quiet at 3s. 6d. to 3s. 7d. per lb. The *Camphor* oil which was bought in at the last auctions is said to be held at 9d. per lb. *Citronella* quiet at ¾d. per oz. for tins or bottles. Oil of *Cloves* is quoted at from 3s. to 3s. 6d. per lb. for English distilled, according to quality. *Menthol* is arriving in rather heavy quantities, and prices must be pronounced somewhat easier. There are several sellers at 7s. 6d. per lb., spot terms, for fair quality crystals, but the trade are holding off in expectation of lower rates. American *Peppermint* oil (HGH) dull at 11s. per lb. American reports speak of a pretty strong buying by speculators, but prices have not advanced. *Lemongrass* oil rules steady at 1½d. to 1¾d. per oz. Italian oils quiet. *Bergamot*, however, keeps up well in price, although it usually declines at this period of the year, when the demand has been mostly satisfied. *Otto of Rose* firm and in good demand. *Spearmint* oil is reported somewhat easier from New York, at 7s. per lb. c.i.f. The *Violet* pomade is now being prepared in France, and the *Jasmine* will soon be taken in hand.

OILS (VARIOUS).—*Cocunut oil* again firmer, Ceylon in pipes on the spot, 24s. 9d. to 25s.; c.i.f. terms, 24s.; Cochin, 27s.; and sales of fine quality at 28s.; for arrival 27s. is also asked. Mauritius in hogs-heads, 25s. *Cotton-seed oil* quiet; crude, 19s. 9d.; refined, 22s. 3d. to 22s. 6d. *Linseed oil* is advancing, and closes at 23s. 3d. to 23s. 6d. on the spot; Hull also dearer, spot 22s. 4½d. to 22s. 6d. naked. *Palm oil*, fine Lagos, 24s. 6d. *Petroleum* quiet, American, 5½d. to 5¾d.; Russian, 5¾d. to 5½d. *Rape oil* has a declining tendency, brown, 31s. 9d.; refined, 33s. 6d. *Turpentine* dearer, American spirits, 30s. to 30s. 3d. on the spot. *Olive oil*, 42s. to 43s. for Spanish and Messina; Mogadore is worth 38s.

ORRIS ROOT.—Higher prices are again quoted from Italy. best *Florentine* being now quoted at 70s., and second quality at 60s. per cwt. in Leghorn; while for *Verona orris* from 32s. to 37s. 6d. per cwt. is asked.

PHENACETIN is being continually lowered in price through the competition of the manufacturers.

POTASH SALTS.—*Chlorate* has been advanced to 5d. on the spot, under which nothing can be bought. For forward delivery 5½d. to 5¾d. is asked. *Bichromate* quiet at 4d. *Yellow prussiate*: 9½d. for both English and foreign. *Saltpetre*: German refined, 18s. 6d. to 19s. on the spot; English, 21s.

POTASSIUM BROMIDE.—There are offers of this article from America at 1s. 5d. per lb. for lots of 20 cwt.

QUICKSILVER has been fairly steady this week; the importers quote 9l. 5s., and second-hand holders 9l. 3s. 6d. to 9l. 4s.; *Italian quicksilver*, which has lately been arriving in pretty considerable quantities, being offered at a fraction below the rate.

QUININE.—Only a few transactions are reported this week, and those have been of lower prices, one lot of second-hand German having said to have sold at 1s. 1½d. for net cash on the spot, but we do not know whether this is an authentic sale. On the same day another parcel changed hands at 1s. 2d. The makers are nearly all much above these prices—*Howard's* brand 1s. 6d. for vials, and 1s. 8d. for bottles; *B. & S.* and *Brunswick*, 1s. 5d. for bulk; *Italian*, 1s. 3d. to 1s. 3½d. for bulk.

SAFFRON continues to advance, and 51s. 6d. to 52s. is quoted for fine Valencia.

SARSAPARILLA.—There has been a strong demand for *Mexican*, and very little of it is now left in New York, while the primary markets are also said to be bare. *Vera Cruz* is offering at 3¼d. to 4¼d. c.i.f., and *Honduras* is also in better inquiry, at 1s. 3d. to 1s. 9d. c.i.f., according to brand.

SENEGA.—There has been a good Continental demand in the New York market, and the cheap lots are reported to be cleared off. The price now is 1s. 7½d. to 1s. 8d. (c.i.f.). The new crop is expected to arrive in about two months.

SERPENTARIA.—An upward movement is reported from America, where the home trade has been buying freely. The new crop is due in about two months.

SHELLAC.—The demand for spot parcels for consumption is fairly active, and there have been several small transactions during the week under review, but for delivery the market shows very little animation indeed. At the auctions the following quantities passed under the hammer:—

	Cases	Cases
Orange lac	540 of which 230 were sold	
Garnet „	117 „ 117	„
Button „	103 „ 13	„
	750	360

Second *Orange* parcels were held at prices above the current market rules by the owners, but fine orange sold at 2s. to 3s. below valuation, while the *Button* sold realised firm prices, and *Garnet* advanced about 1s. per cwt. all round, selling at 71s. for free unworked, and 67s. to 68s. for cakey worked. We also hear of some small sales of *Fine orange* lac, ASSL brand, on the spot, at 104s. per cwt. Business at the call has been principally in TN for May delivery, at 77s., and July at 78s. per cwt., and to-day the market is slightly easier, the following being the quotations:—

	Mar.	Apr.	May	June	July
Orange TN, sellers	75/6	76/	76/	77/	77/6
„ buyers	74/6	74/6	75/6	76/	77/
Garnet AC, sellers	73/	73/6	73/0	73/	73/
			at		
„ buyers	70/	70/	72/6	72/	72/

SILVER.—The continued advance in the price of the metal is proportionately affecting the quotations for the nitrate.

SODA SALTS.—*Ash* at 1½d. to 1½d. per degree London, and 1½d. less 5 to 6 per cent. on the Tyne. *Bicarbonate*, firm at 6l. 5s. *Crustic*: the advance is well maintained with a strong demand; 60 to 70 per cent. white, 9l. 5s. to 10l. 5s.; cream, 8l. 15s. to 9l.; *Crystals* quiet, London ex-ship, 55s. to 56s.; Tyne, 45s. 6d. to 46s. 6d. *Nitrate*, flat and unchanged.

SOY.—Retail sales of China at 1s. 3d. per gallon.

SPERMACE.—The American market has a stronger tendency, and it is thought that a movement towards much higher prices is not unlikely to occur shortly. The quotation still comes at 1s. to 1s. 0½d. for blocks, and 1s. 2d. for cakes, but there is very little to be had in the market.

SPICES.—*Arrowroot* dull of sale. Bermuda bought in at 1s. 10d. to 2s. *Cassia lignea* quiet, 22s. 6d. nearest price.

Cassia buds, 44s. to 46s. per cwt. *Ginger*: Jamaica rather easier, with sales of 107 packages new crop common lean to middling at 61s. to 77s. per cwt. *Mace* slightly easier. Penang ordinary mouldy, but red at 2s. 5d.; West Indian at 2s. 1d. to 2s. 5d. *Nutmegs* cheaper for larger sizes, but small bring full rates; Singapore (107), 2s. 7d. per lb. *Black pepper* flat and easier at the auctions: Singapore, 5½d. to 5½d.; good heavy Malabar, 6d. to 6½d. *White pepper* also lower, good Siam, 9½d.; fair Penang, 7½d. to 7½d.; Singapore, 10½d. for arrival, which is lower. *Pimento*, firm, medium quality 3d. to 3½d.

STICKLAC.—Firm, with small sales of good *Siam*, fairly free from wood, at 42s. 6d. per cwt.

TEA.—The Congou market is very steady to a trifle dearer, though trade generally is not very active. The quotation for common leaf tea is still 4d. to 4½d., but the quotations in the terminal market for the rather better grades dealt in by the Clearing House are higher for the week. The dearth of good medium tea, from 8d. to 1s., is becoming more and more marked, and finer grades are still being inquired for by exporters. Souchongs are still being forced off in large quantities, mostly on Chinese account, and some good teas were sold from 4½d. to 5d. on Tuesday. For anyone of a speculative turn of mind these Souchongs at present quotations should be interesting. Newmakes are steady, and fine honeysuckle sorts are wanted at firm prices. Scented teas are quiet without change. *Assams* are firm for all grades, and there is a pretty general feeling that we are not likely to see the useful Souchongs and Pekoe Souchongs, which can now be bought from 7d. to 7½d., any cheaper. On the other hand we shall no doubt see lower quotations for worse tea, as the common leaf and broken which generally comes in at this time of the year is put on the market. *Ceylons* are firmer after the sudden fall of last week.

THYMOL.—We referred a few weeks ago to the advance in the price of this article. Messrs. Böhringer & Sons state that the employment of thymol in the manufacture of certain new preparations has suddenly caused such a large demand for this article that available lots have grown very scarce. The present quotation is from 12s. to 14s. per lb., but higher prices are anticipated.

TONQUIN BEANS.—The New York market remains exceedingly firm, and *Angosturas* are not obtainable under 6s. 3d., c.i.f. terms, from the second hand, some holders asking 3d. more. The market is practically clear of *Pará* beans, though some odd lots might perhaps be secured at 5s. c.i.f.

TURMERIC.—Fairly large transactions at firm prices are reported during the week. *Bengal*: at 10s. 3d. to 10s. 6d. *Madras*: fair hard yellow finger up to 14s., which shows an advance of about 6d.

WAX.—*Bees'-wax* is reported in good demand, with sales at a slight advance over the auction prices. *Japan wax* neglected at 45s. to 46s. per cwt. for good pale squares.

THE GERMAN MARKETS.

HAMBURG, March 11.

THERE is a little more activity in our drug market, and many prices show a slight advance, the following being the principal matters of interest:—*Agar-Agar*, 190m.; *Balsam copaiba*, Bahia, firm at 525m.; *Balsam of Peru*, 825m. to 840m. *Camphor* again dearer at 550m. for prompt and forward delivery. *Cantharides* in demand at 7.75m. to 8m. for good Russian. *Condurango* has arrived in large quantities, and is now quoted at 140m. *China galls* lower, say 130m. *Cutch* improving; 56m. to 58m. for “Deer” brand. *Coca leaves*, Bolivian, 250m. *Insect powder*, prime Dalmatian, 200m. *Lycopodium*, 270m. *Ergot of rye*, best Russian, 246m. *Peppermint oil*, H.G.H., quiet at 10.30m. per lb.; Japanese, 920m. *Jalap* dearer, and good quality scarce. Seventeen serons have arrived, and the price to-day is 198m. *Dividivi* in good demand at 19m. to 33m. *Japan wax*, white, 86m. 5,000 cases have just arrived and caused somewhat lower prices for prompt delivery. *Carnauba wax*, yellow, 110m. to 115m. *Cloves* firmer at 91m. *Saltpetre*

that at 7.95m. Alcohol prices are improving, and the quotation is now 22 50m. Sarsaparilla, best quality Tampico, 84m. Worm seeds of ordinary quality 36m.; finest ditto, 46m.

CHEMICALS IN THE NORTH OF ENGLAND.

THE chemical market continues very firm, with prices moving upwards for most articles. The American demand for *Caustic soda*, *Sulphate of soda*, and *Soda ash* continues very brisk. The threatened coal strike in the Midlands prevents Lancashire makers from quoting for forward business, and sales are therefore only for immediate wants. It is hoped that some arrangement will be made to prevent a strike, but otherwise the consequences must be disastrous to the chemical trade in Lancashire. It would also affect the makers on Tyneside, as most of the lime used in the manufacture of bleaching powder is drawn from Buxton and its neighbourhood.

BICARBONATE OF SODA continues scarce, but prices remain the same; 5*l.* 15*s.* per ton in 1-cwt. kegs, f.o.b. Liverpool, and 5*l.* 15*s.* per ton, f.o.b. Tyne, with usual allowance for large casks.

BLEACHING POWDER declined during the early part of the week, but has recovered itself within the last day or two; 5*l.* 5*s.* per ton on rails for softwood casks; and 5*l.* 12*s.* 6*d.* per ton, f.o.b. Liverpool, for hardwood casks; 5*l.* 5*s.* to 5*l.* 7*s.* 6*d.* f.o.r. Glasgow; 5*l.* 5*s.* for softwood, and 5*l.* 7*s.* 6*d.* for hardwood, f.o.r. or f.o.b. Tyne; 5*l.* 15*s.* per ton, ex ship Thames, with 20*s.* per ton extra for 1-cwt. kegs, 15*s.* for 1½-cwt. kegs, and 7*s.* 6*d.* for 3-cwt. casks.

CAUSTIC SODA.—Prices are again higher, with good demand. White, 60 per cent., 8*l.* 7*s.* 6*d.* to 8*l.* 10*s.* per ton; 70 per cent., 9*l.* 7*s.* 6*d.* to 9*l.* 10*s.*; 74 per cent., 10*l.* 5*s.* to 10*l.* 7*s.* 6*d.* f.o.b. Liverpool. Cream, 7*l.* 15*s.* to 7*l.* 17*s.* 6*d.*, f.o.r., or 8*l.* to 8*l.* 2*s.* 6*d.* f.o.b. Liverpool. The Newcastle price has advanced to 10*l.* 5*s.* to 10*l.* 10*s.* per ton for 77 per cent, prompt delivery.

CHLORATE OF POTASH has been advanced to 5*d.* per lb. for early delivery, and 5½*d.* to 5½*d.* for forward business delivered Glasgow, Liverpool, and Newcastle.

HYPOSULPHITE OF SODA remains unchanged, but there is a good inquiry for this article. Prices quoted—4*l.* 5*s.* per ton in 5 to 7-cwt. casks, and 4*l.* 15*s.* per ton in 1-cwt. kegs, f.o.b. Tyne.

SODA ASH continues in good demand. Liverpool *Caustic and Carbonated* 1½*d.* per degree; Newcastle, 48 to 52 per cent, 1½*d.* per degree, less 5 per cent.

SODA CRYSTALS are slightly easier at 2*l.* 17*s.* 6*d.* to 3*l.* per ton, f.o.b. Liverpool, in 3-cwt. casks, net weight. Newcastle lower at 45*s.* 6*d.* to 46*s.* per ton gross weight, f.o.b. Tyne, 52*s.* to 52*s.* 6*d.* ex ship Thames.

SULPHATE OF COPPER very firm for early shipment, 26*l.* to 26*l.* 10*s.* for present wants, with lower prices for later deliveries.

SULPHATE OF SODA unchanged in price. Prompt delivery 30*s.* to 32*s.* 6*d.*, f.o.r. Widnes or St. Helens, and 32*s.* 6*d.* f.o.r. or f.o.b. Tyne. Ground in casks 42*s.* 6*d.* per ton, f.o.b. Tyne.

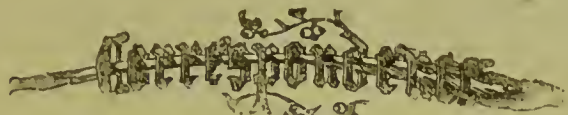
AMERICAN PHARMACEUTICAL JOURNALS appear to be confused sometimes about the two principal pharmaceutical organisations in Great Britain. We are told by one that "Mr. Sidney Plowman, senior honorary secretary to the Pharmaceutical Society of Great Britain, has departed for Australia." It was the Pharmaceutical Conference which Mr. Plowman was at one time an honorary secretary of, but that was more than two years ago. The Pharmaceutical Society is the body which is empowered to grant certificates of competency to chemists and druggists; the Pharmaceutical Conference is, like the American Pharmaceutical Association, a body which meets once a year for social and scientific purposes. The former is the older and more abused body. We accept in advance the thanks of the *Western Druggist* for this information.

LONDON DRUG STATISTICS.

The following figures refer to the stocks of the principal drugs in the port of London on February 28, 1890, and to the imports and deliveries during the first two months of 1890, as compared with the preceding year:—

Article	Stocks		Imported		Delivered	
	1890	1889	1890	1889	1890	1889
Aloes ..os & pkgs	9,244	7,197	1,711	851	705	643
" ..gourds	1,300	2,062	63	172	107	158
Anise, Star ..chts	71	142	—	40	—	37
Arrowroot ..cks	11,620	10,583	2,883	1,685	2,476	1,987
" ..bxs & tins	5,348	6,767	84	59	830	1,152
Balsams ..cks, &c.	2,243	396	116	—	151	24
Bark (Cinchona),						
S.American cases	454	535	—	5	8	6
bis. &c.	30,183	34,307	1,531	900	3,434	658
E.I., Ceylon, and						
Java ..cks	417	1,372	64	431	43	417
bis. &c.	25,539	24,764	9,116	11,773	7,653	7,825
Borax ..cks	377	581	21	—	121	37
Calumba	1,788	1,729	127	94	223	209
Camphor	863	336	2,162	—	1,332	591
Cardamoms ..chts	1,561	961	766	569	530	193
Cochineal ..srs	5,339	4,814	1,573	515	617	664
Coco. Ind. bgs, &	138	315	—	—	34	34
Cream of Tartar cks	10	11	—	8	—	10
Cubeba ..cks	201	50	—	—	108	74
Dragon's Blood cks	122	107	8	51	30	24
Galls, China, &c. os	2,055	1,571	1,493	167	408	721
Turkey, &c. os	3,111	3,056	526	1,642	1,152	1,303
Gums						
Ammoniac pkgs	77	121	1	6	15	10
Animi & Copal						
pkgs	8,190	4,811	1,563	1,339	2,925	1,343
Arabic ..cks	20,966	23,043	4,538	8,180	5,487	4,580
Asafetida ..	311	266	—	3	40	86
Benzoin ..	2,247	7,160	688	545	534	372
Damar ..	5,174	2,755	1,123	1,181	1,143	917
Galbanum ..	50	—	24	—	8	—
Gamboge ..	51	105	28	29	40	17
Guaiaecum ..	18	12	—	—	1	4
Kino ..	78	92	—	6	39	1
Kowrie ..tins	1,373	1,463	421	699	397	611
Mastic ..pkgs	24	46	—	19	3	4
Myrrh ..	388	520	22	118	82	94
Olibanum ..	5,010	3,778	1,954	2,054	683	1,004
Sandalwood ..	602	745	422	214	104	218
Tragacanth ..	6,931	6,071	586	1,911	1,033	1,576
Indigo, E.I. ..chts	11,180	10,586	5,703	4,894	3,993	3,345
Spanish srs	2,853	4,294	1,911	2,971	608	696
Ipecac. ..cks & bgs	156	61	238	123	264	92
Jalap ..bils	82	74	12	—	1	13
Lao Dye ..chts	5,636	5,854	—	—	3	26
Nux Vomica pkgs	334	1,051	162	16	295	91
Oils						
Anise ..os	63	98	53	111	73	21
Cassia ..	87	52	120	65	61	29
Castor ..cks	417	556	218	67	222	87
" ..os	4,132	5,028	1,695	369	779	2,349
Cocoa-nut ..tins	2,344	1,494	412	701	685	697
Olive ..cks, &c.	1,105	665	1,187	582	871	287
Palm ..tins	28	32	21	21	12	51
Opium ..chts, &c.	—	1,634	—	170	—	153
Rhubarb ..chts	775	1,020	167	235	241	238
Safflower ..bils, &c.	419	572	30	—	64	18
Nit. of Potash tns	414	666	978	657	1,764	585
" Soda ..	2,441	4,083	3,376	3,438	1,977	1,363
Sarsaparilla ..his	233	331	143	231	188	286
Senna ..bils, &c.	3,762	1,725	1,614	446	1,007	612
Shellac, Orange						
chts, &c.	37,870	44,534	2,941	3,517	5,901	5,569
Garnet ..	7,190	14,138	—	—	2,702	1,071
Buttong ..	5,861	6,284	1,281	624	1,800	2,147
Total .. chests	50,921	64,956	4,222	4,241	10,183	8,787
Sticklac ..chts, &c.	2,811	3,851	—	427	265	403
Gambier ..tins	1,168	1,322	1,703	1,691	1,222	1,526
Cutch ..	2,388	3,670	51	1,013	240	601
" ..	2,408	3,222	—	101	144	106
Turnerite ..	19	35	28	57	28	34
Vermillion, cks, &c.						
Wax, bees' ..bils	362	501	56	83	478	113
srs	938	1,335	304	726	295	619
" ..cks & os	24	17	—	—	—	—
" ..oakes						
" Japan ..pkgs	1,557	1,120	26	1	114	231

A SUPERIOR BLACK INK, which is not affected by water or acids, is made by mixing warm solutions of potassium bichromate and gelatine, exposing to sunlight for half an hour, adding a solution of nigrosin in water, filtering, and finally adding a few drops of creosote.



Memoranda for Correspondents.

Always send your proper name and address: we do not publish them unless you wish: if you do not, please use a distinctive nom-de-plume.

Write on one side of the paper only; and devote a separate piece of paper to each query if you ask more than one, or if you are writing about other matters at the same time.

If you send us newspapers, please mark what you wish us to read.

Ask us anything of pharmaceutical interest: we shall do our best to reply.

Before writing for formulæ consult the last volume, if you have it.

Letters, queries, &c. will be attended to in the order received.

Reform of the Pharmaceutical Society.

SIR,—Whilst many earnest reformers amongst us will regret the premature abandonment of the Pharmacy Acts Amendment Bill, which we were disposed to accept with some modifications, for the good it contained, and as a first instalment of necessary reforms, yet its hasty withdrawal at the first blast of opposition shows plainly how hopeless it is to expect anything really progressive from the present half-hearted, unrepresentative Council, who neither possess the will, the courage, nor, it must be added, the support, necessary to fight an uphill battle on behalf of the trade.

Let us for a moment analyse facts and figures, with the view of finding out some of the reasons for their impotence in this respect in the past, and to suggest a more excellent way of proceeding in the future.

The total strength of the Council electorate is 3,501; but, as one half of these did not vote at the last election, and another half, to put it mildly, have no confidence in their representatives, although for many years past they have not had much chance of changing them, it follows as a result that the present Council is really elected by only some 1,000 (principally London) voters, yet imagine that they reflect the opinions of, and now vainly endeavour to provide the necessary legislative measures for, the 14,500 chemists and druggists of the United Kingdom.

Is not this a strange anachronism, and one that should have the closest attention of every voter? Can it be possible that a council, constituted in this way, could possess the necessary elements for passing any opposed Bill, much less any measure which might seriously threaten the vested interests of grocers, oilmen, and stores? We say it is not. Therefore, would it not be the wisest and best policy to promote, in the first place, a practically unopposed measure for the unification of titles, enlargement and consolidation of the Society, for sweeping away all pettifogging restrictions to the free entry of all elected members into the Council, and for the reduction of the subscription to 10s., in order to strengthen and consolidate the Society?

Set your own house in order, oh ye slow-coach councillors! When this is accomplished, the combination and co-operation of the trade, secured by the admission into the Society of a clear majority of the whole body, say a membership of eight to ten thousand of the cream of the trade, would not the power and ability of the Council for legislative purposes be immensely increased, and could we not look forward with tolerable confidence to the passing of a Bill at no distant date, "to restrict the dispensing, compounding, and vending of all medicines to the qualified chemist," or, as your correspondent "Viator" puts it, "An Act of Parliament to render it penal for any person except a registered chemist to sell any kind of drug or medicine whatsoever, or any proprietary article put up for medicinal purposes"?

We call upon every member of the Society and of the trade to combine together to attain this desirable result, which is our perfectly equitable, legitimate, and just right, both expedient on behalf of the public safety and in agreement with the universal custom amongst the Continental nations.

Cardiff.

I am, sir, yours faithfully,

ALFRED COLEMAN.

A. D., Ph. Ch. (6/52), says the best thing to do, and the best way to do it, is:—(1) To unite the trade by drafting a Pharmacy Act, the object of which shall be that the preparation, dispensing, and vending of all medicines be confined to efficiently trained, examined, and certificated pharmacists. The trade would go for this as one man. (2) A copy of the Bill to be forwarded to a leading pharmacist in every town or district, and a petition setting forth the just claims of the trade and the urgent necessity for protecting the public against the dangers arising from the vending of patent medicines by unqualified and incompetent persons, to be sent to every member of the craft. He to endeavour to procure the signatures of all the men (and women) of light and leading in his district. Petitions thus signed to be presented to the parliamentary representatives, and every effort made to obtain their support. Until a determined, bold, and united effort be made on the lines I have indicated, I respectfully assert that all has not been done that ought, could, and should have been attempted, by a body of educated and ill-requited, responsible, and deserving servants of the public. For more than twenty-five years I have taken a deep interest in pharmaceutical politics. I am a "working-man" member of the craft, and sincerely and intensely desire that every member should at once join the ranks of the pharmaceutical reformers, and by giving their hearty, generous, and enthusiastic support to leading men, willing to urge forward an amended Pharmacy Act (framed for the protection of their interests, on the lines I have roughly described), prove that they are in hearty sympathy with the forward party. The one thing needful is to organise, organise, organise!

The North of England Pharmaceutical Association.

SIR,—I extremely regret if I have in any way offended our fellow-tradesmen by not affixing my signature to the queries published under the above heading in your issue of March 1. I deemed it advisable not to publish my name, not wishing anyone to think I was biased against the president of the North of England branch. But, knowing that Newcastle possesses a museum and library second to none in the provinces, with every facility for keeping juniors and apprentices together, and fitting them to take their stand by the side of the greatest pharmacists of the country, it pains me, as a chemist, to see such an institution lying useless.

If Mr. Martin cannot reply to my letter as it is, I must leave the subject for others to pursue, and subscribe myself again

Yours, &c.,

A NEWCASTLE CHEMIST.

Lectures for Pharmacists.

SIR,—Although unsuccessful in obtaining a "place" for my sketch of a lecture on coal-tar, I cannot refrain from thanking you for the valuable service you have rendered young pharmacists in general, and myself in particular, for the valuable suggestions that have been evolved by the January post-card competition.

I think it is of the utmost importance for chemists to come before the public at favourable opportunities to evince to them that their education fits them for the important positions they hold, and that they are not merely salesmen of goods that they know little or nothing about. Besides, it gives a stimulus to study and investigation to prepare for a lecture on subjects with which otherwise one might be content with a mere superficial knowledge.

Yours faithfully,

March 4.

R. L. E. (1'61.)

Drossing Skins.

SIR,—Some time since a correspondent in THE CHEMIST AND DRUGGIST asked if anyone could suggest some means of softening skins cured with alum. I have as yet seen no reply. Some little time since a friend asked my advice with regard to a deer skin which was used as a carriage rug. It had evidently been cured with alum, and had become infested with the larvæ of some insects, which were rapidly destroying it. I advised that it should be steeped in a very

weak solution of corrosive sublimate, and supplied a rather large quantity of ammon. chlor. to dissolve it. On inquiry about it some little while afterwards I was informed it answered very well indeed, and also had a remarkable effect on the skin, which previously had been hard as a board, but had now become quite soft and pliable.

A few weeks since a captain of a yacht asked me if I could recommend him any thing to soften some skins cured with alum, as they were so hard as to be almost useless. Amongst them were some bird skins. I recommended him to wash the skins inside with a solution of sal ammoniac. He tried it on the bird skins first, and informed me it rendered them as soft and pliable as silk. In another case it had the same effect.

I thought perhaps the above information might be of service to others.

Yours truly,

X. Y. Z. (1/19.)

Tincture of Kino.

SIR,—In July, 1887, I made a batch of tinct. kino, strictly B.P.; about half of it has been sent out, the remainder has gone into a jelly. I shall be pleased if you can tell me the reason of it doing so. I understood when the new formula was introduced the object of the alteration was to prevent any gelatinisation. I may say that I have made the tincture many times according to the old form, that is with S.V. rect. only, but never had any difficulty with it.

Yours respectfully,

J. P. (256/30.)

[We have always regarded the addition of glycerine as an effectual preventive of gelatinisation, and this opinion is shared by most of those who have paid attention to the subject. It is possible that our correspondent has been working with a kino which is not obtained from the official source. This is a point which might be inquired into; but, apart from that, the subject is one upon which a general expression of opinion from our readers is desirable.—ED. C. & D.]

DISPENSING NOTES.

The opinions of practical readers are invited on subjects discussed under this heading.

A Bismuth Mixture.

1/51. H. S. F. Brown asks how the precipitate is formed in the following mixture:—

Pot. iod.	..	..	..	..	gr. iiij.
Tr. bellad.	..	..	..	..	℥x.
Mist. bismuth. sed.	..	..	..	..	℥ss.

Ter die.

The formula for Mist. Bismuth. Sed. is:—

Bismuth. subnit.	..	..	..	..	gr. x.
Sodii bicarb.	..	..	..	..	.. x.
Pulv. trag. co.	..	..	..	..	.. x.
Aque ad	..	..	..	..	1 oz.

The patient had the mixture two weeks running and it was nearly white. The third week she brought it back, and by this time it had a heavy brick-red precipitate in it. [The precipitate is bismuth oxyiodide, the formation of which, by interaction of potassium iodide and bismuth subcarbonate, cannot be prevented, but in this case has been delayed owing to the presence of the mucilaginous substances. It is a proved fact that mucilage delays chemical action. This is as good an example of the fact as we have come across lately.]

An Explosion.

SIR,—On making up an ointment yesterday, consisting of 20 grs. of thymol to 1 oz. of vaseline (Chesebrough), I powdered the thymol in a glass mortar, and added a few drops of S.V.R. for the purpose of dissolving it, and triturated them together, when immediately an explosion occurred, completely shattering the mortar. Have you or any of your

numerous readers met with a similar experience, or can they explain the cause? I may add that I have made it up the same way repeatedly before without meeting with any accident.

Yours truly,

SCOTONIAN. (7/23.)

[This is a way the glass mortar has. We published accounts of similar incidents two or three years ago. Have any of the correspondents of that time any new theories to advance?—ED.]

Morphine Oleate.

1/53. Bunsen has had the following to dispense:—

Hydrarg. oleat.	..	..	..	..	℥ss.
Morph. oleat.	..	..	..	..	℥j.

M. Ft. applic. pro genu.

"Bunsen" asks how to dispense this correctly. What strength is the morphine oleate, and of what consistence should the finished product be?

[We should say that the prescriber is unfamiliar with the oleates. As explained in "The Art of Dispensing," page 116, "Oleates of mercury and morphine contain 1 grain of alkaloid, irrespective of the mercurial strength." In this case the 10-per-cent. oleate, which is official, should be supplied, but it would be advantageous to consult the prescriber regarding the morphine strength which he desires. He apparently means the finished product to contain 3·3 per cent. of mercury only.]

A Black Salicylate Mixture.

Why does the following mixture turn black on standing twenty-four or forty-eight hours?

Sodæ salicyl.	..	..	..	..	℥ij.
" bicarb.	..	..	..	..	℥j.
Tr. nucis vomicæ	..	..	..	..	℥ij.
Aque chloroformi ad	..	..	..	..	℥viij.

M. Ft. mist.

A. W. (2/42.)

[Salicylate mixtures are liable to change colour, especially in presence of free alkali and organic matter, such as, in this case, tincture of nux vomica. See "The Art of Dispensing," page 132. The amount of impurity in the salicylate has much to do with the intensity of the colour. The natural salicylate is not affected in this way.]

LEGAL QUERIES.

ACKNOWLEDGMENTS OF BILLS.—Messrs. Fletcher, Fletcher & Stevenson lately asked the Board of Inland Revenue whether in acknowledging bills of exchange for sums amounting to 2*l.* or upwards the use of a receipt stamp is legally necessary. The reply is that such acknowledgments are liable to stamp duty as receipts.

2/41. *Nux Areca*.—An unregistered man must not be a partner in a chemist's business. There is nothing against his having an interest in the sale of druggeries, &c.

255/22. *W. W.* asks if he is infringing the laws of the General Post Office by supplying his customers with postage-stamps, not for the sake of profit, but simply to oblige them. He is. It is illegal for any person other than a Post Office employé to sell stamps except under the authority of a licence granted by the Board of Inland Revenue. The law on the subject is contained in 33 and 34 Vict. cap. 98, sections 5 to 13. The penalty for selling without a licence is, under section 7, 20*l.*

5/65. *F. A. B.*—It would be unlawful for an unregistered person to sell an arsenical preparation, either as a sheep-dip or as an insecticide, unless he could satisfy the court that the transaction should be regarded as a wholesale one. We think he could not. But the initiation of any prosecution against unregistered persons for selling poisons is left with the Pharmaceutical Council.

5/8. *S. B.*—Your friend evidently was not "in business before August 1, 1868," and therefore cannot claim registration. If, however, he thinks he has any such claim let him give particulars of his career previous to that date to the Registrar, 17 Bloomsbury Square.

4/69 and 5/72. These correspondents write about unregistered persons who sell poisons, and respecting whom information has been given to the secretary of the Pharmaceutical Society. *Vet* (this correspondent is a veterinary surgeon, and not a registered chemist) wrote to the Council to say that an individual was continuing to sell scheduled poisons in face of their warning; would they prosecute if they produced evidence? The Council declined to interfere. *Lege Agere* gave information about a person who sold Kay's essence without putting his name and address on the space provided by the makers for that purpose. The reply was, the onus of proceedings for offences under sec. 17 is not thrown on the Pharmaceutical Society, but may be instituted by any individual, and, in the opinion of the Council, most properly by the local police authorities. This correspondent rightly assumes "that a chemist can sell any mixture containing poison without placing the name of the poison or the word poison on the bottle, &c., provided he dispenses such mixture himself and places his name and address on the bottle, &c., and enters the ingredients therein contained in a book and keeps a register of names and addresses of persons to whom it is sold. It matters little, as far as the Pharmacy Act is concerned, whether he places a medicine stamp on it or not." He adds:—"If a person not registered sold such a mixture (provided it was not patented under the great seal—see *Alpe*), he would be liable, under the 17th section, even though dispensed by a registered chemist. This is one of the advantages which a chemist possesses." Mr. *Alpe's* point is that he would be liable under the 15th section. He would be liable under the 17th section too.

6/10. *Sodæ Bibor.*—It is illegal for a chemist to employ an apprentice (under 18 years of age) in his shop for more than seventy-four hours in a week, including meal-times.

5/62. *Doubtful.*—A tenant from year to year is not bound to effect "substantial repairs," but he must keep the premises wind and water tight and do "ordinary repairs." He would have no right to alter the premises without the landlord's consent. We must remind you that questions of this kind are rather beyond our scope, and we could not advise you as to the remedy a landlord may have in a hypothetic case, as we do not know the circumstances.

7/1. *Benzoin.*—What salary the assistant is entitled to under the circumstances would depend on how he came to leave. The executors or executrix can carry on the business under the old style if they like, but the more usual form is "Executors of the late —."

6/59. *S. T. (Hamburg).*—You cannot acquire the right to call yourself a chemist and druggist or to sell poisons in this country without passing certain examinations.

7/49. *Manager.*—As a registered chemist you can conduct a business on behalf of the executors of your late employer.

MISCELLANEOUS INQUIRIES.

Correspondents who have made inquiries regarding the following subjects will find the information in the numbers indicated.

4/68. *Semper.*—**Monthol Snuff.**—November 30, 1889, page 759.

3/40. *J. H. F.*—**Silvering Glass.**—Ordinary method, December 21, 1889, page 877; paste, April 27, 1889, page 576.

257/54. *A. C.* wishes to convey from London to his pharmacy in the Channel Islands 40 or 50 gallons of distilled water at regular intervals. If it were shipped in glass casks the freight would be too high, and a firm has suggested that he should use a new cask which has been soaked with water for a week or two. He asks us:—(1) Whether a cask would be likely to contaminate the water in a week! (this being the average time it would take to cross the Channel). (2) Whether keeping the water in a galvanised vessel, with a brass or iron tap, would be objectionable, the water to be used for dispensing?

To the first question we have to reply in the affirmative. Casks are made of oak, which contains tannin, and the water would take that up readily enough. It would be advisable to coat the interior of the cask with bitumen or some other substance which would not contaminate the water. A tin-lined cask would, however, be the best thing to use, and this would dispose of the necessity for storage-tanks. Pure distilled water may be kept in metallic vessels, but if the water is at all contaminated with nitrous acid or ammonia, as it sometimes is, this becomes decidedly objectionable.

257/2. *Fritz.*—(1) You will doubtless see the inconsistency of appealing to the trade for a formula for a certain preparation and on the very next page inserting an advertisement of that preparation by the maker. This would happen if we were to comply with your request. (2) Some shopkeepers call a saturated solution of oxalic acid "spirit of vitriol, for cleaning brasses."

2/29. *J. J. S.*—We know of no means whereby the Ph.D. degree can now be obtained except after three or four years' life and study at one or more German universities.

2/27. *Mag. Cit.*—You will find an interesting correspondence regarding **Violin Varnish** in the three issues beginning June 9, 1888. Here the amber-resin theory is fully discussed. See also the *DIARY*, page 260.

2/28. *Yorkshireman.*—In the *Practitioner* for March (Macmillan & Co., 1s. 6d.) you will find a paper on "Hypnotism" by Dr. A. T. Myers, which will suit your purpose.

2/30. *J. Greaves.*—Morton's veterinary works are, or were, published by Longmans & Co., but we are under the impression that the book to which you refer is out of print.

2/40. *Students.*—See our last Educational number, September 21, page 411.

2/43. *S. M. Bookholes.*—A razor.

2/46. *Yorkshire.*—**Carbolic Jelly for Toothache.**—A one or two drachm bottle of this is generally given for 6d. Half fill the bottle with collodion, then pour in as much crystallised carbolic acid, previously liquefied by heat, and shake. A jelly is at once formed. A bit of this, the size of a pearl of barley, should be placed in the hollow tooth, previously dried out with absorbent cotton, and covered over with cotton.

3/80. *W. Smith.*—**To Bleach a Carved Ivory Card-case.**—Sponge it with solution of peroxide of hydrogen, and expose to the light. Repeat the process several times.

4/25. *Attraction.*—You appear to labour under a misapprehension regarding what "Lanoline" is. This is the term which is applied to one purified wool-fat only, viz., that manufactured by Benno Jaffé & Darmstaedter, and it is this which Mr. Helbing has referred to in his notes. This is purified by Liebreich's process. We have never had any difficulty in mixing lanoline with its own weight of water. (2) The

liquid paraffin referred to is a heavy oil of specific gravity 0.840, or thereabout. It is not a burning-oil. Your best plan is to use white vaseline instead of it, and the cerasin. You have evidently not consulted Mr. Helbing's previous paper. (3) To determine how much alcohol there is in temperance beer, take 10 oz. of it and distil 6 oz., dilute the distillate with water to 10 oz., and from the specific gravity judge the amount of alcohol or proof spirit present. The limit fixed by the Excise is 2 per cent. of proof spirit (*not* alcohol), but they do not prosecute for anything under 3 per cent. (4) We should be suspicious of a sample of castor-oil which congealed at 36° F. See Mr. Conroy's paper on the adulteration of the oil with cocoanut oil, in our issue of November 16, 1889, page 685. If the oil is free from granulated matter at the ordinary temperature it is not likely to be adulterated with cocoanut oil.

4/59. *Castor*.—See reply 251/74 in our last issue.

4/66. *H*.—There is no process for making water take up more sulphur than it is actually capable of doing by simply shaking a little precipitated sulphur with water. If you were more specific in stating what you require we might be able to give you more assistance.

4/67. *Viburnum*.—**Menthol Ointment** :—

Menthol	1 drachm
Chloroform	1 "
Hard paraffin	2 "
Vaseline	6 "

Melt the paraffins and stir until of the thickness of a cream. Then add the menthol dissolved in the chloroform, and continue to stir for five minutes.

4/74. *Superna Sequor*.—There is nothing unusual about the prescription. The emulsion will not keep.

23/27. *W. T. W.*—Thirty grains is a perfectly safe dose of sulphonal to take. The dose is from 10 to 30 grains. Two tablespoonfuls have been taken, and although the man slept for two or three days he came out of it none the worse.

251/49. *Omicron*.—You will find good chemical information regarding **Manures** in Dr. A. B. Griffith's "Treatise," published by Whitaker & Co. We do not know of any small book which gives particulars regarding the manufacture of bone manures. Consult Spon's Encyclopædia for this matter.

253/63. *T. F. E.*—(1) **Stains of Hydrobromic Acid, Tannin, and Laudanum**.—The stains in the pocket-handkerchiefs and towels—we presume that is what you mean, for your writing is very indistinct—should be treated first with solution of ammonia, then wash with cold water, and finally treat with a weak solution of bleaching-powder and water. (2) **The Wet Compress as a Substitute for Poultices**.—The compress, as we stated in a recent article, is largely used in Germany. Various antiseptic solutions are employed, such as corrosive sublimate (1-1000), creolin (1-50), carbolic acid (1-40), &c. Boric acid water (1-25) is used for applications to the face. In different kinds of inflammation lint is simply soaked with one of the solutions and placed on the affected surface; precaution must be taken to see that the lint is sterilised, and it should be covered by some waterproof material, such as oiled silk. Over this, to increase the effect, ordinary cotton-wool is sometimes adjusted, and lastly the whole is secured by a bandage. This treatment is claimed to be aseptic, easily and conveniently applied without the aid of a fire (which poultices necessitate), cheap, and only requiring change once in twenty-four hours. Further, the elevated temperature is constant (which is not the case with poultices), and there is no difficulty or pain to the patient in removing it. In the treatment of cases of painful whitlow it is easy to secure

relief of pain by increasing for a time the proportion of antiseptic, say of carbolic acid, from 2 to 4 or 5 per cent. In angina, diphtheria, pleuritis, pneumonia, and the different bronchitic affections of young children, the throat and chest are covered with such a compress, simply made with cold water, over this oiled silk, and then layers of flannel, the whole forming the so-called Priessnitz dressing. These compresses also give excellent results in the treatment of pain in the stomach and intestines.

258/67. *Kompo* has some trouble in making **Composition Essence**. His formula is :—

Bayberry bark in powder	3 oz.
Pinus canadensis "	1½ "
Ginger "	2½ "
Cinnamon "	1 "
Cloves "	1 "
Capsicum "	2 "
Glycerine	4 "
Rectified spirit	16 "
Water	20 "

He mixes the liquids and macerates the drugs in the mixture for seven days, then transfers to a percolator, sets aside the first percolate, and continues to percolate with water until the drugs are exhausted. This second percolate is to be evaporated to 16 fluid oz.

[As far as we can gather from our correspondent he mixes the liquids, and is troubled with (1) an increase of bulk, and (2) "a cloudy, dirty brown precipitate." We have no clear statement as to what the increase of bulk is. The second percolate should be evaporated to as much as will, with the first, make 2 pints of essence, and the clear character which "Kompo" is aiming at is obtained by adding carbonate of potash in the proportion of 1 or 2 grains to the ounce of the essence.]

1/17. *Stannous Chloride*.—You do not give your name, and must repeat your query according to our rules if you wish a reply.

1/66. *Iota*.—**Furniture Cream**.—Soft soap, 2 oz.; bees-wax, 12 oz.; carbonate of potash, 2 oz.; water, 1 pint. Heat together until a perfectly white cream is formed, bring to the boil and strain, then add 3 pints of turpentine, and enough water to make 6 pints of cream. For furniture polish see November 3, 1888, p. 638, and the 1889 DIARY, under "Household."

Information Wanted.

[Replies to the following requests are solicited by correspondents of THE CHEMIST AND DRUGGIST.]

2/20. Formula for Dr. Garrod's guaiacum drops, as used in Somerset.

2/13. Small printing machines: where to get.

1/21. Formula for Long's specific—a wash for cattle.

5/71. Who supplies stereo blocks of animals for use in veterinary announcements?

6/1. Jackson's night-light floats; where obtainable?

7/20. Makers of boxes similar to those in public places to receive contributions.

Information Supplied.

Replying to 242/68, in *re* "Haarland's Drops," I would suggest that "Haarlem" or "Dutch drops" is the article required. YORKSHIRE. (3/1.)

"Red-Cross Nurse."—The *Pictorial World* in its issue of May 21, 1885, gave a coloured supplement illustrating the costume of the "Red-Cross nurses, which gives a better idea than any description could convey.

W. T. MIGNOT TUCKER (Glastonbury).

PALATABLE TONIC LAXATIVE.

FERRIS & CO.'S PATENT

CASCARA

Prepared with the finest sweetened Eating Chocolate, the proportion of the active ingredient being carefully adjusted so that each Tablet or Bonbon contains a dose equivalent to twenty minims of the Fluid Extract of Cascara. The Tablets are of such a form that they can be easily divided, should a smaller dose be desired; and *the taste can hardly be distinguished from that of ordinary Chocolate.*

Feb. 8, 1889.

"Your tasteless liquid extract of Cascara Sagrada and the Bonbons have given me great satisfaction. A little patient greatly appreciates the Bonbons."

—, M.R.C.S.

To Messrs. FERRIS & Co.

In habitual or chronic Constipation. Invaluable for children, ladies, and invalids. No nauseous bitter taste. By far the most agreeable form of administering Cascara Sagrada yet introduced.

In Boxes, 1s. 9d. each; 18s. per dozen.

Sole Manufacturers and Patentees, FERRIS & CO., BRISTOL.

CHOCOLATE

Feb. 13, 1889.

"DEAR SIR,—Please send me a dozen boxes of your Cascara Bonbons. They are a very pleasant way of taking a valuable and nauseous medicine, and they answer their purpose admirably."

—, L.R.C.P., M.R.C.S.

Messrs. FERRIS.

BONBONS.

THE KING OF HOLLAND

IS

HIGHLY PLEASED WITH

VAN HOUTEN'S COCOA

AND

Has Granted the Firm (unsolicited)

The right of styling their Works the

ROYAL COCOA FACTORY

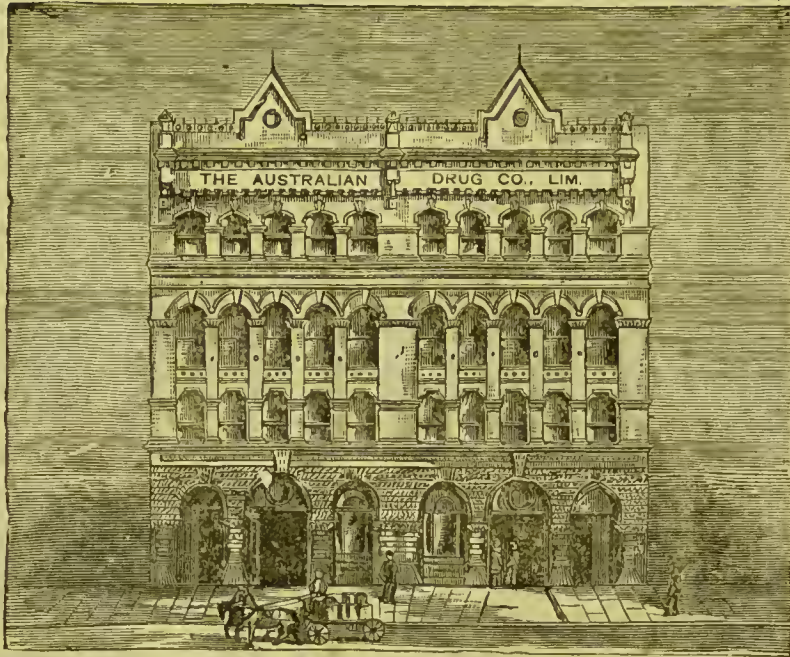
(By Deed of August 12, 1889).

NEW SOUTH WALES

THE AUSTRALIAN DRUG CO., LIM.,

LATE E. PROSSER & CO.,

IMPORTERS OF PATENT MEDICINES, DRUGGISTS'
SUNDRIES, DYE GOODS,
SURGICAL INSTRUMENTS, PERFUMERY,
FANCY SOAPS, SPONGES.



IMPORTERS OF BRUSHWARE, CORDIAL MAKERS,
MACHINERY, CORKS, BOTTLES, LABELS,
PHOTOGRAPHIC CHEMICALS AND MATERIALS.

Wholesale Druggists, 19 & 21 O'Connell Street, SYDNEY.

Agencies for Patent Medicines and other Goods solicited. Travellers cover New South Wales and Queensland.

London Agents: LAUGHLAND, MACKAY & BAKER, 50 Lime Street. E.C.

NEW SOUTH WALES.

W. H. SOUL & Co.



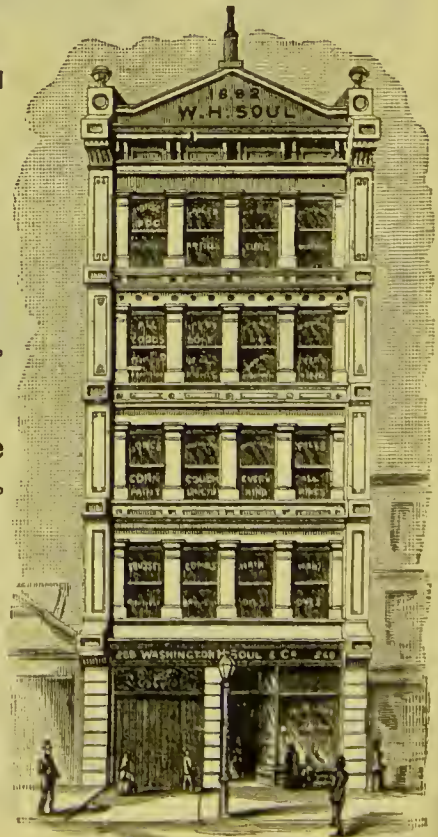
Nos. 158, 160, 162, & 268

**PITT STREET,
SYDNEY, N.S.W.**

Will be pleased to
fill any lines from their
large Stock, which the
Trade may be unable
to obtain from their
usual Jobbers.

TERMS CASH.

W. H. S. & Co. can arrange
with pushing Houses to receive
Goods on Commission for
prompt Sale in this Colony.



7 DOORS FROM KING STREET.

4 DOORS FROM PARK STREET



ESTABLISHED 1870

PROSSER, TAYLOR & CO.

(LATE BERKLEY, TAYLOR & CO.),

**WHOLESALE DRUGGISTS AND IMPORTERS,
AND
MANUFACTURING CHEMISTS
BRISBANE, QUEENSLAND.**

CONTRACTORS TO THE QUEENSLAND GOVERNMENT.

Importers of Drugs, Chemicals, and Druggists' Sundries, Patent Medicines and Perfumery; Surgical Instruments, Photographic Sundries, Confectioners' and Dyers' Goods, Dental Sundries, Soda Water Machinery, Bottling Racks, Egg-shape and Lamont's Soda Water Bottles, Corks, Essences, Labels, and all Cordial Makers' Requirements.

All parts of Queensland visited at regular intervals by experienced Travellers.

Agencies solicited from Firms who are prepared to actively introduce their Manufactures into the Colony.

LONDON AGENTS—

MESSRS. LAUGHLAND, MACKAY & BAKER, 50 LIME STREET, E.C.

B. G. LENNON & CO., PORT ELIZABETH
& EAST LONDON,
LENNON & TEBB, CAPE TOWN,
Wholesale Druggists & Druggists' Sundriesmen

LONDON OFFICE: **B. G. LENNON & CO., 14 BUNHILL ROW, E.C.**
AGENCIES UNDERTAKEN.

MENTHOL Our Extra Steam Refined quality, is in firm, hard, dry and snowy white crystals, entirely free from oily contamination (and therefore of the highest melting point.) As the original and largest manufacturers in the world of the true Japan Menthel, we guarantee our brand to be absolutely pure. Beware of substitutes. For full particulars, therapeutic uses, etc. see special circulars to be had on application.

Our Extra Steam Refined Oil is treble distilled and twice rectified by steam, by an entirely new process and in apparatus of our own invention, by which all these polymeris products

PEPPERMINT of a tarry and resinous nature which are objected to by some consumers are extracted. It is of water white colour, retaining its full aroma, pungency and strength and guaranteed absolutely pure and soluble in spirits of wine.

Yokohama, Japan. COCKING & Co. Established 1868.
Commission Merchants, Wholesale Druggists and Manufacturing Chemists.

OTHER SPECIALITIES.

Cod Liver, Fish and Orange Oils, Vegetable Wax and Isinglass.

Monthly Market Report and detail circulars on application.

LONDON AGENTS:—SPIES BROS & Co., 108, Fenchurch Street.

Telegram Address—"COCKING YOKOHAMA."

CAMPBOR This is the genuine essential oil as produced in the

manufacture of the Solid Camphor of Commerce. Our brand is guaranteed to be the natural oil and not the fictitious mixture of refuse Camphor and Turpentine generally sold. Having made a special study of its manufacture we have succeeded in producing a colourless oil and entirely free from any smell. It is a remedy in Rheumatism, a good solvent of resins, and the most perfect article for the use of the essential oil distiller.

VICTORIA.

ROCKE, TOMPSITT & CO.,
WHOLESALE DRUGGISTS,
MELBOURNE,

AND

119 & 120 LONDON WALL, E.C.

Samples and Quotations solicited.

Agenies undertaken on the most advantageous terms.

Wholesale Depot for Sander & Son's Pure Volatile Eucalyptus Oil (Eucalyptol), and Importers of Oil of Eucalyptus.

Wholesale Agents—Messrs. Hodgkinson, Prestons & King, 81 Bishopsgate Street Without, E.C.

FELTON, GRIMWADE & CO.,
Wholesale Druggists and Manufacturing Chemists,
MELBOURNE, VICTORIA.

LONDON AGENTS:—

Messrs. GRIMWADE, RIDLEY & CO., Mildmay Chambers, 82 Bishopsgate Street

Wholesale Agents for Bosisto's Genuine Oil of Eucalyptus.

NEW ZEALAND.

KEMPTHORNE, PROSSER & CO.,
NEW ZEALAND DRUG COMPANY, LIMITED,
 Wholesale Druggists,
 MANUFACTURING CHEMISTS, AND COMMISSION MERCHANTS,
 Head Office and Factory, DUNEDIN.

BRANCH HOUSES:

High Street, **CHRISTCHURCH,**
 Hunter Street, **WELLINGTON,**
 Shortland Street, **AUCKLAND,**
Patent and Proprietary Medicines Agency.



NEW ZEALAND.

London Agents—

Messrs. GRIMWADE, RIDLEY & Co., 82 Bishopsgate Street.

TROMMSDORFF'S SOZOIODOL PREPARATIONS

(SALTS OF THE DI-IODOPARAPHENOLSULPHONIC ACID).

Substitute for Iodoform. **Odourless, easily soluble, quite inoffensive. No injurious secondary effects. Easy application in any form, e.g.,** Dusting Powder, either pure or with Talc, Ointment with Lanoline, Soziodol Cotton and Gauze, Bougies, Watery Solutions of different Concentrations, Collodion, etc.

Great success obtained in **antiseptic surgery, skin diseases, in the most various diseases of the nose, pharynx, and larynx; in chronic processes of inflammation of the auditory organs, and the superior respiratory passages, in tuberculous ulcerations, especially in the throat; in diseases of the eye, in gonorrhoea, in the treatment of gynaecological cases, in disorders of the stomach; in articular rheumatism and other forms of this disease; in cancer, and in many other diseases.**

The preparations are for sale by all Wholesale Druggists. Pamphlets descriptive of the excellent results obtained up to date to be had on application.

H. TROMMSDORFF, MANUFACTURER OF CHEMICALS, ERFURT, GERMANY.

DEUTSCHMANN & WORONIECKI,
LONDON AND HAMBURG.

CHEAPEST HOUSE IN THE TRADE FOR

GLUCOSE, DEXTRINE, FARINA, CARAMEL
PATENT GUM & GLUE.

LONDON BRANCH:—101 LEADENHALL STREET, E.C.

HALF A CENTURY OF SUCCESS

THE ONLY GENUINE MINT ALCOHOL IS

DE RICQLÈS'

MINT ALCOHOL.

Recommended by the highest Medical Authorities for Indigestion, Stomach Ache, Heartburn, and Headache. It dispels immediately all uncomfortable feeling. Indispensable during the hot weather. An excellent article for the Toilet and Teeth. A grand Preservative during periods of Epidemics.

53 AWARDS, of which 15 are Diplomas of Honour & 14 Gold Medals
DEPOTS EVERYWHERE.

Manufactory at Lyons (France), 9 Cours d'Herbouville
PARIS, 41 rue Richer.

Insist on the name De Ricqlès.

INDIA.

PEAKE, ALLEN & CO.

CHEMISTS, DRUGGISTS,

AND

GENERAL MERCHANTS,

LUCKNOW, OUDH, INDIA,

Possess exceptional facilities for the introduction of NEW SPECIALITIES, Patent Medicines, Druggists' Sundries, Perfumery, &c.

DURBAN,

NATAL.

THE NATAL DRUG CO., LD.

(Late Bentley & Vanderpump),

WHOLESALE DRUGGISTS,

IMPORTERS, AND MANUFACTURING CHEMISTS.

AGENCIES undertaken for the Sale of PROPRIETARY ARTICLES, and other Goods suited to the SOUTH AFRICAN MARKETS.

LONDON AGENTS:

DAVIS & SOPER, Bury Street, St. Mary-Axe, LONDON.

Telegraphic Address—"REPOSOS LONDON."

DURBAN,

NATAL.

GUSTAVE CHANTEAUD,

64 RUE DE TURENNE, PARIS.

FACTORY AT VENDOME.

GUSTAVE CHANTEAUD'S SEIDLITZ.

Granulated, effervescent.

In cases containing 100 bottles £5

DOSIMETRIC GRANULES, in boxes of 10 tubes.

SOLUBLE "LENTILLES" (Lentil-shaped pastilles),
for Hypodermic Injection.

Gustave Chanteaud's special syringe for using the Soluble "Lentilles."

Triturated "Lentilles" for administration by the mouth.

Antiseptic "Lentilles" for external use.

General Prices Current and conditions of sale furnished on application.

UNITED STATES.

B. KEITH & CO.,

MANUFACTURERS OF

PURE CONCENTRATED MEDICINES, CONCENTRATED TINCTURES, ETC.

We make a full line of RESINOIDS, such as PODOPHYLLIN, LEPTANDRIN, EUONYMIN, IRISIN, HYDRASTIN, &c., ALL PURE.

So-called Concentrations are in the market, called by the same name as manufactures, that are made by triturating extracts etc., with sugar of milk, powdered root, etc

WHAT ARE CONCENTRATED TINCTURES?

They are not made from the crude material, but by dissolving the active principles in Alcohol in definite proportions, and invariably represent a uniform amount of therapeutic power.

Send for printed matter on CON. TINCT. AVENA SATIVA in the Morphia or Opium Habit, and certificates from different members of the Medical Profession, citing cases under their charge, treated by it; also REVISED AND ENLARGED MANUAL; also Price Lists, to

B. KEITH & CO.,

75 WILLIAM STREET NEW YORK. U.S.A.

MANUFACTURERS

OF

GOODS ADAPTED TO THE DRUG TRADE

ARE OFFERED

Special facilities for the Sale of
such in the United States

BY

E. C. RICH CO., Ltd.

167 Chambers Street, 201 State Street,

NEW YORK, U.S.A. BOSTON, U.S.A.

Satisfactory references. Correspondence solicited.

JULIUS LEVY,

WHOLESALE DRUGGIST & SUNDRYMAN,

CHARLOTTE PLACE, SYDNEY.

BRANCH—15 & 17 FLINDERS LANE, MELBOURNE

AGENT FOR

HEINRICH HAENSEL'S Olea ætherea sine terpeno.

E. MERCK, Alkaloids and Glucosides.

GUSTAV LOHSE, Lily of the Valley Perfumery.

ROBERT FRÈRES, Triple Extraits.

Correspondence invited. Special facilities for introducing new lines.

MORSON'S

PURE NATURAL SALICYLIC ACID AND SALICYLATE OF SODIUM

FROM OIL OF WINTERGREEN.

Experimental Research as to the General Comparative Action of the Natural and Artificial Salicylic Acids, and their Salts of Sodium. Read in the Section of Pharmacology and Therapeutics at the Annual Meeting of the British Medical Association held in Leeds, August, 1889. By M. CHARTERIS, M.D., Professor of Therapeutics in the University of Glasgow, and W. MACLENNAN, M.B., C.M.

See *BRITISH MEDICAL JOURNAL*, Nov. 30, 1889.

The deductions from these experiments indicate that artificial salicylic acid and its salt of sodium are dangerous and, in large doses, fatal to animals, while salicin, natural salicylic acid, and its salts of sodium are not. That artificial salicylic acid contains an impurity or impurities, and until this or these can be extracted by the aid of chemistry the internal administration of it or its salts of sodium should be discountenanced. Large and repeated doses of the sodium salt are necessary in the treatment of acute rheumatism, and hence we may account for the restlessness, the confusion, and the delirium sometimes attendant on its use, which have been testified by clinical experience. It is more than probable, too, that the retarded convalescence occurring in some cases of acute rheumatism after the salicylate treatment is due to the great and protracted prostration which the impurity or impurities give rise to. It is to be remembered in connection with these symptoms that prescriptions of the salicylate of sodium are invariably made up, unless otherwise indicated, from the artificial and not the natural salt.

The specimens with which the investigations were carried on were supplied by T. MORSON & SON, London—the Natural Acid and its Soda Salt being manufactured by themselves.

Medical men wishing to avoid the unpleasant and injurious effects of the artificial products, should prescribe the "Natural" preparations—MORSON'S.

31, 33, and 124 SOUTHAMPTON ROW, LONDON, W.C.

London International and Universal Exhibition, 1884, Gold Medal Awarded for our Pharmaceutical Preparations.
Calcutta Exhibition, First-class Certificate and Two Prize Medals Awarded for our Pharmaceutical Preparations.

HEWLETT'S

LIQUOR SANTAL FLAV. c. BUCHU et CUBEBA

THE ORIGINAL PREPARATION.

Price (in England) 10s. 6d. per pound, packed (for Dispensing only) in 10-oz., 22-oz., 40-oz., and 90-oz. Bottles.

HEWLETT'S "PERMANENT" LIQUOR FERRI IODIDI.

LIQUOR EASTONI (HEWLETT'S).

SYRUP EASTONI (HEWLETT'S).

C. J. HEWLETT & SON, MANUFACTURING CHEMISTS, LONDON, E.C.
40, 41, & 42 CHARLOTTE ST.,
ESTABLISHED 1832.

Physicians will oblige, when ordering *Liq. Santal Flav. cum Buchu et Cubeba*, by writing "*Liquor Santal Flav. c. Buchu et Cubeba (Hewlett's)*."

FOR INFLUENZA. PHENACETIN-RIEDEL

MELTING-POINT 275° F.

An ANTI-PYRETIC, ANTI-NEURALGIC, of reputed
Therapeutical effect.

Besides Antipyrin, none of the modern Antipyretics can in its action rival in any way Phenacetin-Riedel. It has the advantage over Antipyrin of being tasteless, its dosage being only half the quantity and its price being less. Is free from any secondary or after effects. The melting-point, 275° F., is of great importance with regard to the purity of the preparation.

SOLE AGENTS:

R. W. GREEFF & CO., 29 MINCING LANE, E.C.

ALSO FOR

SULFONAL-RIEDEL.

TYPKE & KING,

Trade Mark **CHEMICAL MANUFACTURERS,** Trade Mark



22 LAURENCE POUNTNEY LANE,
LONDON, E.C.



Registered. Manufactories: MITCHAM & RAINHAM. Registered.

Pure Acids—VALERIANIC ACID and all VALERIANATES. ANTIMONY GOLDEN SULPHURET, ANTIM: CROCUS LUMP and POWDER. Essences of Pear and Pineapple. POTASSIUM CYANIDE. Nitrate of Ammonia, crystal and granulated. Potass. Sulphid. Iron Perchloride, solid and solution. HYPOPHOSPHITES OF LIME, MANGANESE, SODA, POTASH, &c. ACID PHOSPHORIC 1750 and 1500. Hydrochinon and all Chemicals for Photography.

DINNEFORD'S FLUID MAGNESIA



PERFECT IN PURITY AND UNIFORM IN STRENGTH.

The most efficacious antacid and mild
aperient for Delicate Constitutions.
Ladies, Children, and Infants.

OF ALL WHOLESALE DRUGGISTS.

S. G. CLEMENTS & CO.'S

Cake & Liquid

ANNATTO

PURE, STRONG,
AND UNIFORM.



**BUTTER
COLOURING,
IN OIL.**

ESTABLISHED 1812.

BRISTOL PRIME RENNET

AND RENNET POWDER (for Junkets, &c.).

Prices and terms on application.

Special Prices to Buyers of bulk.

Works 12 Lewins Mead, BRISTOL.

J. ROBBINS & CO.

METHYLENE.

Obtained by the action of Metallic Zinc on Chloroform and Alcohol.
Discovered to be a general Anæsthetic by Dr. RICHARDSON in 1867.

Bottles, 16s.; 8-oz., 8s. 6d.; 4-oz., 4s. 6d.; 2-oz., 2s. 6d.

COMPOUND ANÆSTHETIC ETHER.
For producing Local Anæsthesia.
In 4-oz., 10-oz., and 20-oz. Stopped Bottles, 2s., 4s., and 7s.

OZONIC ETHER.
In 2-oz., 4-oz., 8-oz., and 16-oz. Stopped Bottles, 2s., 3s. 6d., 7s., and 10s.

PEROXIDE OF HYDROGEN.
First introduced as a Medicine by Dr. RICHARDSON.

ETHYLATE of SODIUM
Dr. RICHARDSON'S Formula, for removing Nævi, &c. In 4-oz. & 1-l. Bottles, with elongated Stoppers for applying the Caustic, 2s. 6d. & 4s. 6d.

STYPTIC COLLOID.
For promoting the Healing of Wounds by the first Intest in 2-oz. and 4-oz. Bottles, with Brush, 2s. 6d. and 4s. 6d.; 16-oz., 12s.

CHARCOAL CAPSULES
Containing Pure Vegetable Ivory Charcoal.
In Boxes, 2s. 6d. each.

OXFORD ST. 147

WYLEYS & CO.

MANUFACTURING CHEMISTS

AND

DRUG GRINDERS.

WAREHOUSES, LABORATORIES, AND DRUG MILLS,
COVENTRY.

COMPOUND SULPHUR PELLETS

ACCORDING TO THE FORMULA OF

SIR ALFRED B. GARROD.

One Pound contains 1,000 Pellets.

A Pound of ordinary Sulphur Lozenges will
only give 460.

*Each Pellet contains Five Grains of Pure Sulphur
and One Grain of Cream of Tartar.*

PRICE, in bulk, 2/6 per lb.; or put up in metallic
boxes (20 pellets in each), with descriptive labels,
2/- per dozen.

The above may also be had sweetened with Saccharine
at 3/- per lb.

GASTRIC ANTACID PELLETS,

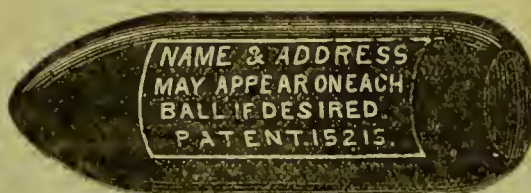
ACCORDING TO THE FORMULA OF

SIR WILLIAM ROBERTS.

PRICE, in bulk, 2/6 per lb.; or put up in metallic
boxes (20 pellets in each), with descriptive labels,
2/- per dozen.

THE DURAPLASTIC COATED HORSE BALL.

(PATENTED.)



"The obvious superiority of these balls over the old paper-wrapped articles will impress the most stolidly conservative of farmers."—*The Chemist and Druggist*, October 27, 1888.

No. 4.—Alterative Balls	...	...	24/	per gross.
" 5.—Astringent Balls	...	...	24/	"
" 12.—Condition Balls ...	...	...	24/	"
" 6.—Cordial Balls	...	...	24/	"
" 7.—Cough Balls	...	...	24/	"
" 16.—Cough Balls	...	...	27/	"
" 17.—Cough Balls	...	...	27/	"
" 8.—Diuretic Balls	...	...	24/	"
" 9.—Fever Balls...	...	...	24/	"
" 1.—Physic Balls	...	...	24/	"
" 2.—Physic Balls	...	...	30/	"
" 3.—Physic Balls	...	...	36/	"
" 18.—Physic Balls	...	...	42/	"
" 19.—Physic Balls	...	...	48/	"
" 15.—Stimulating Balls	...	...	24/	"
" 10.—Tonic Balls...	...	...	24/	"
" 11.—Tonic Balls...	...	...	20/	"
" 13.—Worm Balls	...	...	30/	"
" 14.—Worm Balls	...	...	60/	"

PRIVATE FORMULÆ.

WYLEYS & CO. will be glad to prepare Patent Duraplastic
Balls from private recipes.

LOEFLUND'S MALT EXTRACT

SHOULD BE STOCKED BY EVERY CHEMIST.

Guaranteed absolutely pure; prepared from the finest Malt only; neither ferments nor crystallises, and is by far the Cheapest in the end. In 2-cwt. casks, 28-lb. tins, 7-lb. tins and bottles.



LOEFLUND'S MALT EXT. C. COD LIVER OIL (50 PER CENT.)

Is now prepared with the flavour of the oil entirely covered: a really splendid preparation. In Tins and Bottles.

LOEFLUND'S INFANT'S FOODS: KINDERMILCH & ALPINE MILK RUSKS

Are prescribed by the leading specialists in diseases of children. (ground)

LOEFLUND'S CREAM EMULSION (CREMOR HORDEATUS)

Is invaluable in all cases where Cod Liver Oil causes nausea or is not properly assimilated.

MUSTARD LEAVES, BEST AND CHEAPEST.

Sole Agents—ROBERT BAELEZ & CO., 14-20 ST. MARY AXE, E.C.

LOFTHOUSE & SALTMER,

MANUFACTURING CHEMISTS, WHOLESALE & EXPORT DRUG MERCHANTS,
HULL,

Manufacturers of all Pharmaceutical Preparations on the best and most improved principles.
QUOTATIONS ON APPLICATION.

SOLUT. ÆTHERIS NITROSI (Æther. Hyponit.)

1 part to 5 Sp. Vini Rect. 68 o.p. makes Sp. Æth. Nit. 850.

This concentrated preparation, carefully drawn in our own laboratory, is highly recommended, and daily finding increased favour with the trade for making Sp. Nitre, as required for use, thus avoiding the risk of loss of Nitrous Æther, and the development of free acid, both of which are almost certain to occur in Spts. Nitre which has been some time drawn.

Price in 1-lb. Bottles, 8s. per lb.; in Winchester Quarts, 2s. 10d. per lb., net.

Importers of Cod Liver, Castor, and Olive Oils; Extra Super Essence of Lemon and Bergamot; Otto de Rose, and all Essential Oils; Valencia Saffron; Vanillas; Fruit Essences; Carmine; Aniline Dyes; Bees Wax, &c., &c. Applications for Special Quotations invited.

CURTIS & Co's EFF. BISMUTH, PEPSINE & STEEL

(Formerly YOUNG & POSTANS).

GRAN. EFFER. BISMUTH AND PEPSINE
GRAN. EFFER. BISMUTH, PEPSINE AND STRYCHNINE
GRAN. EFFER. BISMUTH, PEPSINE AND QUININE
GRAN. EFFER. BISMUTH, IRON AND QUININE
GRAN. EFFER. BISMUTH CITRATE
GRAN. EFFER. BISMUTH, IRON AND STRYCHNINE
GRAN. EFFER. CITRATE OF CAFFEINE.

GRAN. EFFER. IRON AND BISMUTH
GRAN. EFFER. IRON, QUININE AND STRYCHNINE
GRAN. EFFER. IRON AND ARSENIC
GRAN. EFFER. IRON AND PEPSINE
GRAN. EFFER. IRON AND QUININE
GRAN. EFFER. IRON, QUININE AND PEPSINE
GRAN. EFFER. HYDROBROMATE OF CAFFEINE.

AND ALL OTHER GRANULAR PREPARATIONS.

GRANULAR EFFERVESCENT ANTIPYRIN

(ORIGINATED AND INTRODUCED BY CURTIS & CO.).

See that all these preparations bear the name of
CURTIS & CO., 48 Baker Street, Portman Square, LONDON, W.

J. F. MACFARLAN & CO.,

MANUFACTURERS OF

MORPHIA AND ITS SALTS,

AND ALL PRODUCTS FROM OPIUM.

PURE CHLOROFORM

ANSWERING ALL THE TESTS OF THE BRITISH PHARMACOPŒIA.

ANÆSTHETIC ETHER, ALOIN, BEBEERIN, CHRYSOPHANIC ACID, SALICIN.

MAY BE HAD FROM ALL THE WHOLESALE HOUSES, AND AT

17 NORTH BRIDGE, EDINBURGH, AND 71 COLEMAN STREET, LONDON.

**Coca
Coca
Coca
Coca**



**Tablets
Lozenges
Elixir
Tea**

A Pamphlet will be forwarded to any applicant containing the testimony of eminent British and Foreign Medical Authorities to the invaluable properties of the Coca Preparations.

RETAIL PRICES.—Coca Tablets and Lozenges in boxes, 1/-, 2/6, & 4/- per Box; Coca Elixir, 3/- per Bottle; Coca Tea in tins of 1 lb. 4/-, ½ lb. 2/-, ¼ lb. 1/-.

MENTHOLIN SNUFF.

This is a Perfect Remedy for Cough or Cold in the Head. It is a powder taken as snuff, and is prepared from the OIL OF MINT principally, together with ingredients from other healing herbs. To all the disorders resulting from a cold, this snuff is an effectual antidote.—See C. & D., Jan. 13, p. 69.

Retail, 1s. 1½d. per Box, by Post 1s. 3d.

COCA TOBACCO.

We take this opportunity of thanking the numerous Chemists all over the Kingdom who patronised us and sold our Coca Tobaccos. We now beg to inform them and the Trade generally that, the difficulty with the Customs having been satisfactorily settled, we are now prepared to execute all orders entrusted to us for these Tobaccos, with our other preparations of Coca (as above), which are now commanding a ready sale.

COCA TOBACCO, Mild, Medium, and Strong 12/- per lb.

USUAL WHOLESALE DISCOUNT.

CAN BE OBTAINED FROM ALL WHOLESALE HOUSES.

THE FRENCH HYGIENIC SOCIETY OF LONDON, 6 CONDUIT STREET, LONDON, W.
REGENT STREET,

WITHOUT A RIVAL!

From the time Medicine was first discovered by the Ancients down to the present none ever made such progress as

BEECHAM'S PILLS.



They stand without a rival, and have by far the largest sale of any Patent Medicine in the World. This is a fact which every business man is bound to admit.

All Foreign Dealers will find BEECHAM'S PILLS the most Saleable Medicine in the Market.

The health-restoring and life-giving properties of these Pills are such as to increase their demand every year.

The words "BEECHAM'S PILLS, SAINT HELENS," are on the Government Stamp affixed to each box.

Prepared only and sold by the Proprietor, THOMAS BEECHAM, ST. HELENS, LANCASHIRE, ENGLAND, in boxes at 1s. 1½d. and 2s. 9d. each, with full instructions for use.

ESTABLISHED 1813.

CLAY, DOD & COMPANY,

WHOLESALE AND EXPORT DRUGGISTS,

52 ST. ANNE STREET, LIVERPOOL.

Address for Telegrams—"CLAY LIVERPOOL."

Telephone No. 1192.

Mills and Laboratories—WAKEFIELD STREET.

**IMPORTERS OF ESSENTIAL OILS, OLIVE OILS, CASTOR OIL,
FINEST NORWEGIAN COD LIVER OIL.**

Manufacturers of all descriptions of

PHARMACEUTICAL PREPARATIONS, COATED TASTELESS PILLS.*Powders ground in own mills. Purity guaranteed.**Samples free on application. Special Quotation to Cash or Large Buyers. Monthly Priced List forwarded on receipt of business card.***BITUMINOL, OR VASELINE SUBSTITUTE.****BARRON, HARVEYS & CO.****GILTSPUR STREET, LONDON, E.C.**Beg to inform their friends and the Trade generally that, having
purchased the Business of**BARRON, SQUIRE & CO., BUSH LANE,**

and also the various Formulæ of the Special Preparations of

JAMES BASS & SONS, HATTON GARDEN,they are prepared to execute orders for the same, and pledge them-
selves to supply them in all their integrity.*Specimens of these Preparations have remained in the Museum of Kew Gardens during 23 years without deterioration.***JOHNS'**The Best and Safest Medicine for all Disorders of the Liver and
Digestive Organs; also invaluable in all Female Complaints.Full
Directions
with each Box**LIVER
PILLS.**

PREPARED AND SOLD BY

W. JOHNS, 6 Wilkes St., LONDON, E.

In Boxes 1s. 1½d. and 2s. 9d. each.

(ESTABLISHED UPWARDS OF 50 YEARS.)

BUYERS ARE CAUTIONED TO SEE THAT THEY GET THE**GENUINE****DR. JOHN HOOPER'S PILLS,**

Which may be known by the Name of the Inventor being on the Government Stamp.

*Handbills and Show Cards will be sent on application to***MAY, ROBERTS & CO., 9 CLERKENWELL ROAD, LONDON, E.C.****AMERICAN BUYERS are particularly Cautioned!!**

Telegraphic Address—"FEEDING BOTTLES LONDON."

THE EUREKA CO.'S
Specialities are—
BUTTER COLOR, CHEESE COLOR,
AND
ESS. OF CALF RENNET
(ABSOLUTELY PURE).



THE GENUINE BRAND

To be had ONLY from

Johnsen & Jørgensen

5 Savage Gardens,

LONDON, E.C.

Try them means buy them!

They sell themselves!

When your customers know them

They won't cram your shelves!

IF YOU REALLY WANT TO INCREASE YOUR SALE KEEP EUREKA PREPARATIONS.
THEY NEVER FAIL!

SAVARESSE'S
CAPSULES.
SANDAL WOOD COPAIBA

36s. and 18s. per dozen.

SAVARS CUBEB CIGARETTES.

Always give relief in Asthma, Influenza, Cold and Hay
Fever. 1/- boxes 9/-, 2/6 boxes 24/- per doz.

"ANGLO-NORWEGIAN"
COD-LIVER OIL.

SEASON 1890.

This Extra Oil is pure, stands the cold without solidifying,
and is quite sweet, with an agreeable odour of the fresh liver.
Artistic Labels, with Chemist's name and address.

EVANS, LESCHER & WEBB,
LONDON.

LIVERPOOL: MONTREAL: [10]
EVANS, SONS & CO. EVANS AND SONS (Lim.)

PURE
CARBONATE OF LITHIA

and all other Lithia Salts.

MERCURIALS

Calomel, Corrosive Sublimate, Oxides, &c.

IODOFORM

Chloral, Terpene, Osmic Acid, Tannin, Tartar Emetic.

LIQUID CHLORIDE OF METHYL, for the treatment
of Rheumatism, Neuralgia, &c.

GRAND PRIX, PARIS EXHIBITION, 1889.

Wholesale from **FUERST BROS.**, 4 Copthall
Buildings, London, E.C.

Sole Agents for **BILLAULT**, Rue Sorbonne; PARIS.
N.B.—Stock of the above kept in London.

Telegrams, "Fuerst," London

[Telephone No. 462.]

WM. RADAM'S
MICROBE
KILLER.
WHOLESALE WAREHOUSE,
111 OXFORD STREET,
LONDON, W.
Specially Useful in Hot
and Invigorating
Climates.
CURES
ALL
BLOOD DISEASES.
Pleasant, Refreshing.

C. R. HARKER, STAGG & MORGAN

WHOLESALE & EXPORT DRUGGISTS

MANUFACTURING CHEMISTS

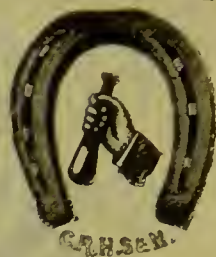
IMPORTERS & DISTILLERS of ESSENTIAL OILS

PHARMACEUTICAL EXTRACTS—FLUID AND SOLID.

STANDARDIZED AND GUARANTEED DRUGS AND PREPARATIONS.

15 LAURENCE POUNTNEY LANE, & ARTHUR ST. WEST, LONDON, E.C.

REGISTERED ADDRESS FOR TELEGRAMS—"EDULCINE LONDON." Telephone No. 1949.



ALOIN,

THE ACTIVE PRINCIPLE OF ALOES,

MANUFACTURED BY THE DISCOVERERS—

T. & H. SMITH & CO., EDINBURGH AND LONDON.

"The uniformity in strength of Aloin, the smallness of its dose, and the certainty of its action, should commend it to the favourable consideration of all medical practitioners."—*Vide* Dr. Wm. Craig's investigations respecting our Aloin, published in the *Edinburgh Medical Journal* for May 1875.

Edinburgh Address—21 Duke St. London Address—12 Worship St., E.C.

New York Office—20 Cedar Street: FRA^s. JA^s. MACNAUGHTAN, Agent. [3]

Guaranteed Pure English Sulphate of Quinine.

PENNY QUININE.

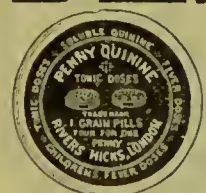
QUININE PILLS.

INFLUENZA PILLS.

Four (Tonic) Doses for One Penny.

One (Fever) Dose for One Penny

Four Pennyworth in a Metal Box.



RIVERS HICKS, 5 SAVAGE GARDENS, TRINITY SQUARE, E.C.

LIBERAL DISCOUNT TO THE TRADE.



SEQUAH'S OIL.

44



SEQUAH'S PRAIRIE FLOWER,

AND

Sequah's Oil.

Prepared solely by

SEQUAH, LIMITED.

SPECIAL

SEND FOR SAMPLE GROSS.

**INDIARUBBER
POROUS PLAISTERS.**

SEND FOR SAMPLE GROSS.

**STRENGTHENING, BELLADONNA,
AND CAPSICUM.**

Manufactured by

WILLIAM MATHER.

Chemists are respectfully informed that by purchasing one gross of any of the above their own Names and Addresses may be printed upon the wrapper and back cloth of each plaister.

PRICE, INCLUSIVE OF PRINTING, **24/-** PER GROSS.

Subject to usual Discount, as per Price List.

W. MATHER.

MANUFACTORY:—

DYER STREET, HULME, MANCHESTER.

London Wholesale and Export Agents:—Messrs. MACE & HALDANE, 94 Milton Street, LONDON, E.C.

Telegrams—
"LINT LIVERPOOL."

THE
LIVERPOOL PATENT LINT CO.,
MARK ST. MILLS,
NETHERFIELD ROAD NORTH,
LIVERPOOL.



LINT. MANUFACTURERS OF
**FLAX, & COTTON,
LINTS,**
ABSORBENT, AND CARDED
COTTON WOOLS,
ABSORBENT, OPEN WHITE, and GREY
BANDAGES,
SURGEON'S, AND CARBOLIZED
TOW.

43 Highest Awards over all Competitors throughout the World.

SEABURY & JOHNSON,
Original Manufacturers of
**PHARMACOPŒIAL AND SURGICAL
PLASTERS,**

IN RUBBER COMBINATION.

Antiseptic Dressings and Absorbents, Bandages.
Oiled Silk and Muslin, and Surgical Dressings
of every description.

Supplies may be obtained through any Wholesale Druggists and Dealers in
Surgical Appliances, or from the Proprietors,

SEABURY & JOHNSON,
46 Jewin Street, London, E.C.,
NEW YORK & HAMBURG.

VINCENT WOOD,

28A, 29 30, 31 PATERNOSTER SQ.; 10, 11, 12, 13 ROSE ST.,
LONDON, E.C.

DEPOTS AT PARIS, NEW YORK,
AND BRUSSELS.

Factories at
STRATFORD; ROSE ST.; NOTTINGHAM

Telegraphic Address—"ACME LONDON."
Registered Trade Mark—"EUREKA."



Bona-fide Manufacturer of Trusses,
Elastic Hosiery, Abdominal Belts,
the Eureka Medicated Fine Wool
Felt Appliances, Obstetric Binders,
Chest Expanding Braces, Suspensory
Bandages, &c., &c.

Any difficulty in procuring the "Eureka" Brand of goods from your
Wholesale Houses, apply direct for name of nearest Agent.

ESTABLISHED 1840.

PERFUMES THE BREATH. STRENGTHENS THE GUMS.
WHITENS & PRESERVES THE TEETH.
ALWAYS REQUISITE.
ADON TO SMOKERS.
ENTIRELY FREE FROM ANY
DELETERIOUS INGREDIENTS.
SOLE PROPRIETORS
THE KENNEDY COY. 2, FALCON ST. LONDON, E.C.

AND OF ALL
WHOLESALE
DRUGGISTS.



FOR
LADIES
OF
FASHION

CRÈME SIMON À LA GLYCERINE.

MARVELLOUS FOR

Softening & Whitening the Complexion. Most efficacious for the Skin.

J. SIMON, 36 RUE DE PROVENCE, PARIS.

FOR SALE BY DRUGGISTS AND FANCY GOODS STORES.

SUPERIOR

TO

VASELINE

AND

CUCUMBERS

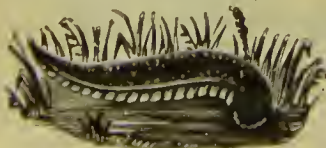
EXTRACTUM SENNÆ LEGUMINUM LIQUIDUM;

Or, FLUID EXTRACT OF SENNA PODS (RANKIN & BORLAND'S).

A pleasant, mild, and efficacious Aperient, superior in many respects to Cascara Sagrada. Dose—From $\frac{1}{2}$ to 1 Fluid Drachm.
See Paper by Dr. MACFARLANE in *The Lancet* of Saturday, July 27th, 1889, p. 164.

Prepared by **RANKIN & BORLAND**, Pharmaceutical Chemists, KILMARNOCK, N.B.

HAMBRO SPECKLED



TRADE MARK
REGISTERED.

LEECHES!

Warranted Healthy. Wholesale
and for Exportation. Direct
from Marshes.

FITCH & NOTTINGHAM,

LEECH BREEDERS,
4 CANONBURY SQUARE, LONDON, W.

All Orders by Post receive immediate attention.

SPONGE IMPORTERS.

M. PETERSON & CO.

(ESTABLISHED 1870),

75 ST. ANNE STREET, LIVERPOOL.

FOR HOME, FOREIGN, & COLONIAL MARKETS.

WINTER GOODS.

Before ordering Chest Protectors, &c., write for sample of HAYWOOD'S PATENT VENTILATING,

The only Chest Protector made on scientific principles.

Manufactured from Pure Natural, Scarlet, and Medicated Pine Wool.
Made also in Vests, Drawers, Combinations, Chest and Back Protectors, Bodices, Waistcoats, Sleeping Socks, Gout Gloves, &c.

Show Stand sent gratis with orders for not less than One Dozen.

Chest Protectors and other Appliances for winter made also in
Chamois Skins, Knitted Wool, Fleecy, Felt, Medicated Pine, &c.

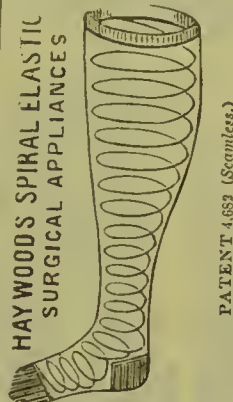
MAGNETIC BELTS,

Chest & Back Protectors, & Socks.

CHILBLAIN SOCKS.

Fleecy Sleeping Socks and Knee Caps, Patent Pile
Surgical Elastic Knee Caps, Socks, and Stockings.

PATENT SEAMLESS, PATENT PILE,
and other Elastic Surgical Stockings, &c.,
in Thread Silk, Cashmere, Scarlet, Pine, and
Natural Wool.



Patent Pile, Protected,
4,618. The Pile lying
over the Indianrubber
Cords, protecting them
and forming a smooth soft
surface to the limb.

Hot Water Bottles and Covers, Respirators, Inhalers, Bronchitis Kettles, Throat Sprays,
Waterproof Coats, Cloaks and Driving Aprons, Footballs, Shin Guards, and Athletic Appli-
ances, Belts, Chest Expanding Braces, Trusses, Suspensory and other Bandages, Druggists'
Sundries, Invalid and Nursery Appliances, &c.

J. H. HAYWOOD, CASTLE GATE, NOTTINGHAM.

DR. JOHN FRANCIS CHURCHILL'S INHALANT



REGISTERED.

"SPIRONE"

TRADE MARK.

FOR THE TREATMENT AND CURE OF ALL

DISEASES OF THE LUNGS, WINDPIPE, NOSE, AND THROAT,

Claims to be a Specific for all Congestive and Inflammatory conditions of the Respiratory Apparatus, and will be found efficacious in

COUGHS AND COLDS, ASTHMA, BRONCHITIS,

Inflammation and Congestion of the Lungs, Pneumonia, Pleurisy, Whooping Cough, Croup, Diphtheria,
Pharyngitis, Laryngitis, Catarrh, Sore Throat, Quinsy, Enlarged Tonsils, Hoarseness, Loss of Voice,
Colds in the Head, Hay Fever, and all other Complaints of the Respiratory Organs.

PREPARED ONLY BY THE INVENTOR.

None Genuine except such as bears the above Trade Mark "SPIRONE" and the Signature of the Inventor upon the Bottle,
on the Label over the Cork, and on the Wrapper,

JOHN FRANCIS CHURCHILL, M.D. (Paris),

The Discoverer of the Specific Cure for Consumption, and of the Medicinal Properties of the Hypophosphites

Price 4s. 6d. and 11s. per Bottle.

SET OF APPARATUS FOR ADMINISTRATION, 15/. PAMPHLETS AND SHOWCARDS FREE ON APPLICATION.

THE SPIRONE COMPANY, Lim., Depot—17A Duke St., Manchester Square, LONDON, W.

MANUFACTORY.

"Eclipse" Glass Works,
Lea Bridge, Clapton, London, E.

Prize Medal, Adelaide Exhibition, 1887.
Award of Merit, Melbourne, 1888.

OFFICES AND WAREHOUSES:

381-3 KINGSLAND ROAD,
LONDON, E.

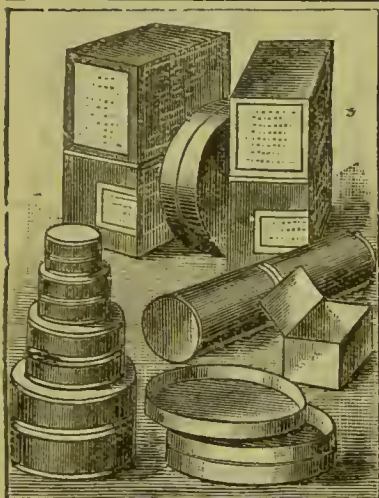
E. A. HEARN & CO.

WHOLESALE AND EXPORT GLASS BOTTLE MANUFACTURERS.

Makers of EVERY DESCRIPTION of Glass Bottles, either PLAIN or STOPPERED, in
WHITE FLINT, AMBER, BLUE, MEDICAL GREEN, ACTINIC GREEN, &c., &c.
OR ANY COLOUR MADE TO ORDER.



FEEDING BOTTLES IN ALL SHAPES,
PLAIN NECKS OR SCREW STOPPERED.
SPECIALITY.—First-class Quality at Reasonable Prices.



BOXES

AUSTIN & CO., 8 GREVILLE ST, HATTON GARDEN, LONDON, E.C.

Steam Works, 2 Printer's Buildings, Broad Yard, Turnmill Street, London,
and Ring Factory, Clonakilty, County Cork.

AUSTRALASIA.

IMPORTANT.

ALL Firms specially desirous of bringing their Specialities before Buyers throughout the whole of Australia and New Zealand should Advertise in THE CHEMIST AND DRUGGIST OF AUSTRALASIA. This Journal is Published Monthly in Melbourne and Sydney, and is devoted exclusively to the interests of Pharmaceutical Affairs in the Australasian Colonies. Its Literary Contents are of such a character as to render the Publication of much value to all Colonial Pharmacists, and the Circulation of THE CHEMIST AND DRUGGIST OF AUSTRALASIA is Universal so far as Australasia is concerned.

SPECIMEN COPIES and SCALE of CHARGES for ADVERTISEMENTS can be obtained on application to The London Manager of THE CHEMIST AND DRUGGIST OF AUSTRALASIA, 42 Cannon Street, London, E.C.

DISPENSING BOTTLES & PHIALS

BEFORE ORDERING

Of any other House, please write for Prices of any size required to either of our Warehouses—

25 Francis St., Tottenham Court Road }
61 Halton Road, Islington } LONDON.
153 Upper Thames Street, City }

ESTABLISHED UPWARDS OF 50 YEARS.

Export Orders to our City Establishment.

I. ISAACS & CO.

GLASS BOTTLE MANUFACTURERS.

BANKERS: LONDON AND WESTMINSTER BANK.

Third Edition (Illustrated), price 6s. 6d.

MUTER'S SHORT MANUAL OF ANALYTICAL CHEMISTRY.

"At once the cheapest and most complete laboratory guide for pharmaceutical students, containing, within 200 pages, everything they require to know, from the simplest testing to the most elaborate quantitative work."

London: SIMPKIN, MARSHALL & CO.,
Stationers' Hall Court, E.C.

HOLLOWAY'S PILLS & OINTMENT

Have the Largest Sale of any Medicine in the World.

MANUFACTURED ONLY AT

Professor HOLLOWAY'S Establishment,
78 New Oxford St. (late 533 Oxford St.), London,

And sold at 1s. 1½d., 2s. 9d., 4s. 6d., 11s., 22s., and 33s. each Box or Pot. Chemists and Druggists selling "Holloway's Pills and Ointment" can on application to the above address, or to the Wholesale House with whom they deal, be supplied free of charge with Handbills and Posters with their name and address printed at foot.

Wholesale Terms see List of "Proprietary Articles" in most Price Currents.



PHILADELPHIA, 1876.

PRIZE MEDALS. INTERNATIONAL EXHIBITIONS.



MELBOURNE, 1880.



SYDNEY, 1879.

KILNER BROTHERS

GLASS BOTTLE MANUFACTURERS.

No. 3^A GREAT NORTHERN GOODS STATION, KING'S CROSS, LONDON.



PARIS, 1878.

Telegraphic Address:

"BOTTLES LONDON."



LONDON, 1862.

Telephone

No. 7503.

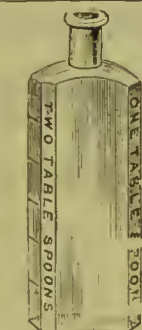


PARIS, 1875.

EXCELLENT
QUALITY.

EXTENSIVE
VARIETY.

PRICES LOW,



Dispensing.

FEEDING, PICKLE,
DRUG, OIL,
SAUCE, VINEGAR

BOTTLES.



FIRST ORDER OF MERIT,
MELBOURNE, 1888.



Feeding.



Dispensing.

WINE, SPIRIT,
BEER,
CONFECTIONERY

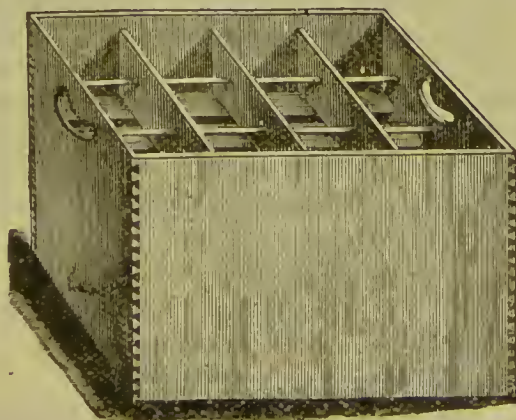
BOTTLES.

QUOTATIONS
AND
SAMPLES SENT
ON
APPLICATION,



Mineral Water
BOTTLES.

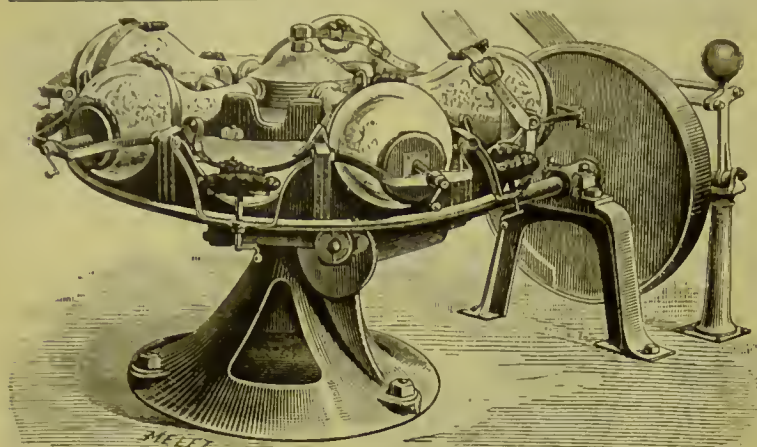
VAN BOXES.



CASES.



Mineral Water
BOTTLES.



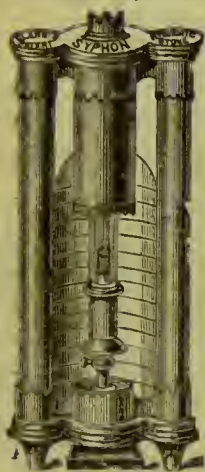
BEYER FRERES, 16 & 18 RUE DE LORRAINE, PARIS.

2 GOLD MEDALS PARIS EXHIBITION, 1889.

NEW AGITATING MACHINE

For macerating and exhausting raw materials in infusion with alcohol, producing 150,000 movements per day in each metal receptacle, with a minimum of force. A considerable economy of time, labour, and capital is obtained in infusing musk, amber, benjamin, civitte, iris, grains, powders, or pharmaceutical products treated with liquids or ether.

These machines are made for 10 or 15 bottles, each containing about 15 litres, as required.



TO CHEMISTS AND DRUGGISTS.

AGENTS WANTED FOR THE SALE OF OLARK'S PATENT

"SYPHON"

(REGISTERED TITLE)

HYGIENIC CONDENSING GAS HEATING STOVES.

NO FLUE REQUIRED. ARE FREE FROM SMELL OR SMOKE.

All injurious vapours are reduced to harmless liquid inside the Stove, and passed out at foot into a tray provided for that purpose.

FOR USE IN HOSPITALS, SICK CHAMBERS, BEDROOMS, HALLS, CONSERVATORIES, CHURCHES, SCHOOLS, ETC.

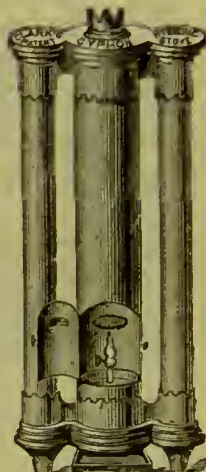
Specially suitable for patients suffering from Bronchial affections, as a moist atmosphere is obtainable when required.

FOR TERMS, PARTICULARS, AND PRICES, APPLY TO

S. CLARK & CO., Patentees & Makers, Syphon Works, Park St., Islington, LONDON, N.

Telegraphic Address:—"SYPHON STOVES LONDON."

Wholesale Agents:—Messrs. S. MAW, SON & THOMPSON, Aldersgate Street, London. E.C.



NEW CAPSULING MACHINE

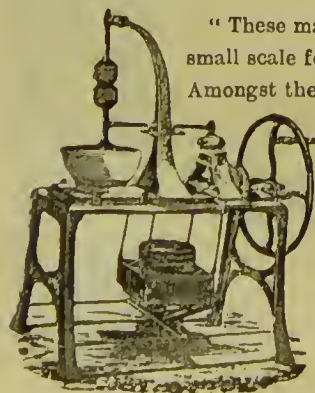
The only Machine
which leaves no crease
or pleat on the
Capsule.



Can be fixed to any
Counter.
A single pull of the lever
is sufficient
to fix the Capsule.

Patentee—**C. MELIN**, 37 Crutched Friars, LONDON, E.C.

GOODALL'S PATENT GRINDING & LEVIGATING MACHINES.

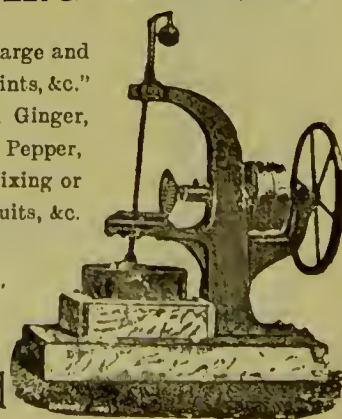


"These machines have for many years proved most serviceable on a large and small scale for Grinding, Levigating, and Mixing Powders, Pill Masses, Paints, &c." Amongst the articles which are readily ground by it may be mentioned Ginger, Seeds, Salts of all kinds, Cream of Tartar, Sugar, Cocoa, Pepper, Spice, Jalap, Rhubarb, Gums, Aloes, Barks, &c.; and for mixing or kneading Lozenges, Pill Masses, Glaziers' Putty, Bread, Biscuits, &c.

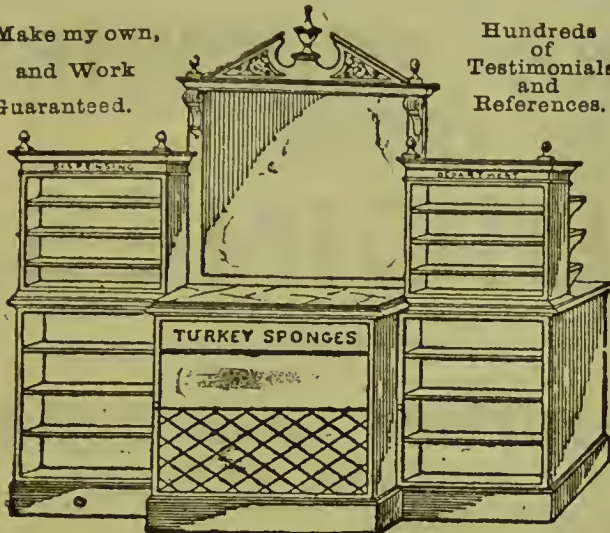
ILLUSTRATED PRICE LIST, with full particulars, sent free.

Prices from £8 10s. to £60.

E. F. GOODALL, Barton-under-Needwood



Make my own,
and Work
Guaranteed.



Hundreds
of
Testimonials
and
References.

The above represents a Plate-glass and Mahogany Dispensing Screen and Counter. The cases on each side of the marble slab over sponge case have silvered glass backs, and are fitted with movable shelves; the cases in front of counter are also fitted with movable shelves. The mahogany used is beautifully figured. At back under counter fitted with Drawers for Corks, Labels, Paper, &c., &c., and the back of screen with three shelves the entire length for Bottles.

6 ft. long, complete, £16; if Screen only, without Counter, £8 10s.

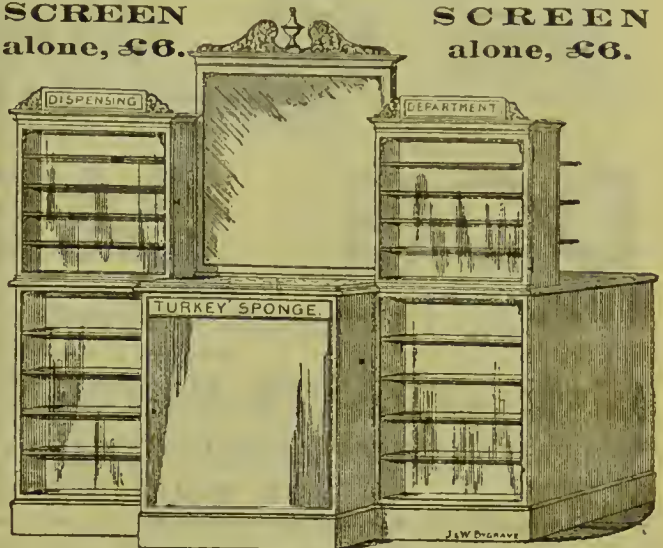
ELKANAH NATALI

(Established 20 Years).

SHOW CASE MAKER AND SHOP FITTER,
207 OLD STREET (Shoreditch End), LONDON.
Workshops—HENSON STREET, E.C.
(ONLY ADDRESSES).

No connection with any other house of the same name.
PLEASE ADDRESS IN FULL.

SCREEN
alone, £6.



SCREEN
alone, £6.

The above represents a solid mahogany Dispensing Screen and glass fronted Counter. The Screen has a glass case at each side, with plate-glass tablets and gold writing on top—"Dispensing Department"; and a plate-glass mirror with marble slab in centre, with mahogany ornamental wood on top. Doors of screen are glazed with best 21-oz. glass, and inside the cases are polished black, with three long shelves right along the back for dispensing bottles. The Counter opens in front with three solid mahogany doors glazed with best 21-oz. glass, centre for sponges underneath. Counter at the back is fitted with a nest of deal drawers and shelves. If 6 feet long, and 5 feet high to top of cases, complete, £11 10s.

J. & W. BYGRAVE.

SHOP FITTERS,

111 Shepherdess Walk, City Road, LONDON, N.

For further particulars please send Business Card.

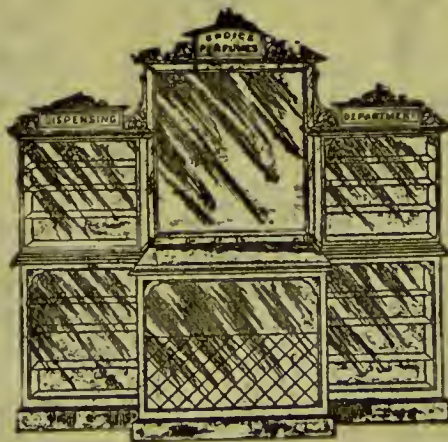
"THE CHEMIST" DISPENSING COUNTER.

6 feet long by 2 feet wide .. £24
If the Dispensing Screen only, £12

This handsome Dispensing Counter is manufactured in Spanish mahogany, and of the best workmanship, so that it will stand any climate. The counter has a solid mahogany top, and plate-glass case front. The centre part fitted to take sponge. A mahogany screen on top, consisting of two plate-glass cases, with shelves inside, and large plate-glass mirror in the centre, and three glass tablets with gold writing in ornamental mahogany carved work. The back of screen fitted with small shelves and a glass poison cupboard. The inside of counter fitted with strong counter drawers, label and cork drawer, open shelves, &c.

BOWLING & GOVIER

Manufacturers of High-class Shop Fittings,
GUN ST., BRUSHFIELD ST.
BISHOPSGATE, E.C.



NOTICE TO THE TRADE.

In consequence of inferior Second-hand Goods being sold for our make, we have found it necessary to protect our reputation for best work with a Trade Mark, as above, and unless goods are so stamped we cannot be answerable.

GEORGE TREBLE & SON, FOR CHEMISTS' SHOP FITTINGS & SHOW CASES.

SHOPS FITTED FROM £50.

DESIGNS AND ESTIMATES SUPPLIED IN TOWN OR COUNTRY.
ESTABLISHED FORTY YEARS. HIGHEST REFERENCES CAN BE GIVEN
THREE PRIZE MEDALS.

Steam Factory: 27 CANAL ROAD, HOXTON, LONDON.

FOR ALL CANINE AILMENTS.

SPRATTS PATENT, LIMITED,

DOG MEDICINES.

Pamphlets on Canine Diseases for gratuitous distribution. Show Cards and Handbills Supplied.

Address: SPRATTS PATENT, LIMITED, LONDON, S.E.

SPRATTS PATENT (AMERICA) LIMITED, 239 to 245 East 56th Street, NEW YORK, U.S.A.

OR YOUR WHOLESALE HOUSE.

BATTLE'S VERMIN KILLER. { Mice eat it readily, and Die on the spot.

TRADE MARK.



Has an immense Sale, and wherever introduced never fails to give satisfaction.—Mice appear attracted to it as by magic, eat it readily, tumble over, and die on the spot. Rats usually die in their runs.—Parties troubled with Vermin may be cleared at once, either from Stacks, Houses, or Ships.

TESTIMONIALS.—Thousands might be published.

From Mr. THOMAS COLTON, Agent for Selby.—A friend of mine purchased a Packet of your VERMIN KILLER last night, doubting its efficacy to-day he called in to say that he had found fifteen dead mice, and had only used part of a packet. —From Mr. EDWARD STURDY, Flemington Mills.—I duly received by post the Packet of your VERMIN KILLER, and found it as represented in your advertisement. It speedily destroyed all the mice in my granary. I enclose 2s. for two more Packets. —Leeds, November 6th, 1887.—I have tried BATTLE'S VERMIN KILLER, and have found it most effectual in clearing my premises of LARGE QUANTITIES OF RATS.—THOMAS B. CROSLAND.—Mr. Stead.

Sold in Packets, 8d., 6d., and 1s. each.

SOLE PROPRIETOR,

Mr. J. R. BATTLE, Chemist, Lincoln, England.

No Chemist or Storekeeper should be without a supply.

ESTABLISHED
1840.

DAY & SONS'

AWARDED
40
PRIZE
MEDALS.

WORLD-FAMED HORSE & CATTLE MEDICINES.

LARGEST SALE IN THE WORLD.



FOR Colic or Gripes in Horses and Cattle.
FOR Debility and Chills in all Stock.
FOR Scour in Calves and Lambs.
FOR Hoven or Blown Cattle and Sheep.
FOR Shivering Fits in Horses.
FOR Weakness after Lambing or Calving.

PRICE—10/ PER HALF-DOZEN, OR 19/ PER DOZ. BOTTLES



FOR Fevers, Yellows, Indigestion, and Dulness
FOR Red Water, Costiveness, and Mawbound.
FOR Disordered System in Cattle.
FOR Bad Cleansing after Calving.
FOR Preventing Milk Fever and Inflammation.
FOR Purifying and Increasing the Milk.

PRICE—12/ PER DOZEN PACKETS.



FOR Healing all Wounds in all Animals.
FOR Kicks, Stake Wounds, Broken Knees in Horses.
FOR Cracked Heels and Saddle Galls in Horses.
FOR Sore Teats and Swollen Udders in Cows and Mares.
FOR Dressing and Anointing in Lambing and Calving.
FOR Every Horse-keeper, Farmer, and Shepherd.

PRICE—2/6 PER BOTTLE.



FOR Ill Condition, Off Appetite, Disordered System.
FOR Heat-lumps, Itching, and Sourvy Skin.
FOR Hidebound, Bad Water, and Blood Ailments.
FOR Coughs, Colds, Sore Throats, and Fevers in Horses.

IN CANISTERS, PRICE—3/6, 7/, 14/, AND 21/.

THE "ORIGINAL" UNIVERSAL MEDICINE CHEST, £2 4s. and £5. FOR ALL DISORDERS OF HORSES, CATTLE, AND SHEEP.

Only Prepared by the Inventors, **DAY & SONS, Crewe, Cheshire, ENGLAND.**

Exporters are invited to apply for — Liberal Discount offered

CARBOLIC POWDER, £6 TON.

1-ton lots and upwards.

CARBOLIC PINK POWDER, 5/-, 7/6, and 10/- per cwt., in bags or casks.

WHITE CARBOLIC POWDER, 10 %, 15 %, and 20 %, equally cheap.

HANDSOME LARGE DECORATED BLACK AND GOLD TIN BOXES,
Holding 1½ lb. (usual 1/- size), 4/6 doz. Ditto, **LARGE SIZE** (usual 1/6 size), holding about double quantity, 6/- doz.

PALE CARBOLIC ACID, 99 per cent. (No. 5), and **CHLORIDE OF LIME** below market prices.

CRUDE CARBOLIC ACID (Brown), 1/-, and 1/6 Gallon; also in patent stoppered bottles, labelled.

SANITARY FLUID or **CREOSOL** (to be used with 100 parts of water, making a *milky fluid*), half usual prices.

All goods delivered free in London or suburbs, or to rail or docks. **THE CHEAPEST HOUSE IN THE TRADE.** [2]

HAMILTON & CO., HIGH STREET, WANDSWORTH, LONDON, S.W.

COLTHURST & HARDING,



BRISTOL—Manufactories: Phoenix Wharf and Temple Gate. Offices: Temple Gate. Telegrams: "Phoenix Bristol."

LONDON—Manufactory: Alpha Works, Millwall E. City Office: 16 Fish Street Hill, E.C. Telegrams: "Alpha Brand London."

HARD LUSTROUS ENAMEL,
IN ALL THE ART SHADES.

For all kinds of decoration on Wood or Iron. Dry with a surface like Porcelain. Sold in small or large Tins, or in bulk. Prices and shades on application.

WHITE LEAD, ZINC WHITE, PAINTS & COLOURS OF ALL KINDS.

MIXED PAINTS READY FOR USE,
In Tins, 1, 2, 4, 7, and 14 lbs. each.

HIGH-CLASS VARNISHES

Of all kinds, for Coachbuilders, Decorators, &c. **OIL BOILERS, REFINERS, & MERCHANTS**

Export Orders receive special and prompt attention.

BALL DENOTES COLOUR OF PAINT.

"WORTH ITS WEIGHT IN GOLD!"

BRAGGI'S OINTMENT AND PLAISTERS.

A CERTAIN and SPEEDY CURE for
SPRAINS, BRUISES, BURNS, WOUNDS, BOILS, SCIATICA, ECZEMA, PILES,

And "the thousand ills which flesh is heir to."

HUNDREDS OF TESTIMONIALS FROM WELL-KNOWN PERSONS.

Ask your Chemist for the OINTMENT or PLASTER, and

DON'T BE PUT OFF WITH ANY OTHER.

Sold everywhere, 1/1½. Post free for 15 Stamps.

P BRAGGI & CO., Ltd., 92 Bartholomew Close, London, E.C.



Used on the Royal Farms at Windsor, Osborne, and Sandringham, and by the principal Stockbreeders everywhere for nearly 60 years.



DAY, SON & HEWITT'S HORSE, CATTLE, AND SHEEP MEDICINES.

THE CHEMICAL EXTRACT.

For assuaging pain and inflammation in all wounds, saddle galls, strains, bruises, swellings, and relaxed tendons in Horses. For painting after calving and lambing, and for swollen udders and sore feet.

2s. 6d. per Bottle; 1-dozen Box, 7s. 6d.

THE RED DRENCH.

Celebrated for inflammatory disorders, such as fevers, pleurisy, foot-and-mouth complaints, yellows, snuffit, and red-water. Also for difficult calving and lambing. Admirably adapted for cleansing and checking feverish symptoms in Cows and Ewes after a bad time of parturition.

For Sheep, 3s. 6d.; for Cattle, 13s. per dozen Box.

THE GASEOUS FLUID.

Unmatched for colic or gripes and debility in Horses, for colds, chills, shivering fits, flux and diarrhoea in Cattle, Calves, and Sheep. For Ewes weakly after lambing and blown Cattle and Sheep, its effects are marvellous.

20s. per dozen Box.

THE GASEODYNE.

Used as a landmark in uncontrollable spasmodic pains and violent bowel complaints. Invaluable for parturition in Mares, Cows, and Ewes.

8s. 6d. per Bottle; 1-dozen Box, 10s. 6d.

THE RED PASTE BALLS and RED POWDERS.

For ill-conditioned Horses and Colts; invaluable after hard hunting or driving. For coughs, colds, staring coat, itching, swollen legs and want of strength. The powder given in the feed will produce fine appetite and tone.

7s. 6d. per dozen; 3-dozen Box, 21s.

THE BLACK PHYSIC BALLS.

These Balls are matchless for thoroughly cleansing the system of all impurities, and for assisting in the expulsion of Worms. Their purgative action soon relieves Costiveness of the Bowels, and checks all Feverish Symptoms arising from gross habit.

Price, 8s. per dozen; Box containing 3 dozen, 23s.

THE BRONCHOLINE.

The great and reliable remedy for Husk or Hoarse in Cattle, Hefers, Calves, and Sheep. Its gaseous odour destroys the worm or parasite in the windpipe, removes the hard cough, and soothes the lungs and other organs.

2s. 6d. per Bottle; 1-dozen Box, 7s. 6d.

THE "KEY TO FARRIERY."

A small work published by us on the general ailments of stock, their treatment and cure.

Large Edition, in Cloth, 2s. 6d.; Small Edition, 1s.

The Stockbreeder's Medicine Chest. No. 1 contains a complete assortment of all our preparations for treating diseases of stock generally, £6 6 0
The Stockbreeder's Medicine Chest. No. 2 is suitable for ordinary Farm use, and contains a useful selection of the above Medicines .. 2 16 6
The Horsekeeper's Medicine Chest. No. 3 is arranged for large Horse Owners, Collieries, &c., and contains 12 specially selected Medicines 5 6 0
The Horsekeeper's Medicine Chest. No. 4 contains a smaller assortment, but has everything requisite for all ordinary ailments in Horses 2 17 6

Prepared only by **DAY, SON & HEWITT, 22 DORSET STREET, LONDON, W.**

LIBERAL DISCOUNT TO FOREIGN BUYERS.

LIST AND PARTICULARS OF AGENTS ON APPLICATION

**PLEASE
NOTE.**

We guarantee our **S.V.R.** to stand the Nitrate of Silver and the Ammonia tests, and to be entirely free from the offensive odour which usually characterises low-price spirits.

Pure Grain Spirit B.P., 56 o.p., 18/5 per gallon.
" " Double Distilled, " 18/9 " "
CASH WITH ORDER.

S.V.R.

SPECIALITY FOR PERFUMERY.

This pure grain spirit, which has been thrice rectified and filtered through charcoal, is being largely used in making high-class Perfumes.

Price, 19/-, 56 o.p.; 19/6, 60 o.p. Cash with order.
Reductions for Quantities.

STEPHEN SMITH & CO., BOW, LONDON, E.

METHYLATED SPIRIT, In Bottles, Cans, and Barrels.

VARNISHES, STAIN VARNISHES, MIXED PAINT, ENAMEL,
IN SMALL PACKAGES READY FOR USE.

CHEMICALS, COLOURS, AND OILS OF ALL KINDS.

S. BOWLEY & SON, Wellington Works, Battersea Bridge, LONDON, S.W.

**JAMES
BURROUGH,**

S.V.R.

CALE ST., CHELSEA, S.W.

and Methyated Spirit

AT LOWEST PRICES.

WRITE FOR QUOTATIONS

S.V.R.

SPECIAL QUOTATIONS FOR QUANTITY.

Cash with
Order

GEORGE PHILLIPS & CO.
St. Andrew's Distillery, 49 Clerkenwell Road,
LONDON, E.C.

THE

CHEAPEST HOUSE

FOR METHYLATED SPIRIT.

DISTILLED BY OURSELVES.

VERY HIGHLY RECTIFIED

AND CHEMICALLY

PURE.

S.V.M.

Jars, 2-gallon, 2/6; 3-gallon, 3/; 4-gallon, 4/.
Drums, 5-gallon, 3/6; 6-gallon, 4/; 10-gallon, 8/.

MAKERS OF

METH. SPIRIT FINEST GRAIN.

NOTE THE
PRICES.

61 o.p. 2/2 per gall. in casks } 2½ per cent.
64 o.p. 2/3 " " } Delivered
TINS EXTRA.

WE ALSO TURN OVER THE VARIOUS
GUMS, SHELLACS, WAX,
GELATINES, GLUES &c.,

ON BROKERAGE

PROFITS.

WE INVITE
COMPARISON

ESTABLISHED

1840.

J. & D. MACNAIR & CO.,

GREETHAM DISTILLERY AND WAREHOUSES,

AND AT 29, 31, 33 Robert St,

BRIDGETON GLASGOW. **MANCHESTER.**

SPECIAL QUALITY.

S.V.R. WATER WHITE.
GRAIN DISTILLED.

SPECIAL IMPORT OF

COD, CASTOR, & OLIVE OILS.

ANGLO-AMERICAN OIL COMPANY, LIM.

LONDON.

HULL.

GREAT YARMOUTH.

LIVERPOOL.

NEWCASTLE.

LYNN.

BRISTOL.

SOUTH SHIELDS.

STOCKTON.

HEAD OFFICES—16 ST. HELENS PLACE, BISHOPSGATE ST., LONDON, E.C.

American Refined Petroleum.

The long established superiority of "**Tea Rose**," "**Royal Daylight**," "**White Rose**," and "**Westminster**" American Petroleum Oils, manufactured by the Standard Oil Company of the United States, is well known to the Trade and to Consumers, and no Oils are so widely and justly celebrated. Their superior burning qualities, freedom from odour and from any tendency to smoke, and their general excellence, have placed them above comparison with any and all other brands.

In order to meet the largely increasing demand for these oils, and the better to supply the Trade generally, we have arranged to import them from the United States in bulk as well as in barrels. We shall fill the Oil which we import in bulk into barrels at our own wharves, and as our cooperage facilities are modelled upon the best American methods, buyers will receive the Oil in tight and clean packages.

Our Tank Steamers, "**Manhattan**" and "**Bayonne**," in their construction, arrangements, power and size, are in advance of any tank steamers afloat, and each has a carrying capacity of 4,000 tons, equivalent to 28,000 barrels of Oil by each steamer.

We shall keep large stocks of these Oils constantly on hand at all our Importing Centres and Depôts, and in this manner be able to supply the Trade promptly. Being the representatives in the United Kingdom of the Standard Oil Company, of America, we are in the best possible position for supplying the trade on the most favourable terms.

To cover the special requirements of London buyers, we have completed the construction of a large Storage Wharf at Purfleet, which will be worked in connection with our Depôts at—

AILS A STREET, BOW CREEK, E.

CANAL WHARF, CHALK FARM ROAD, N.W.

ALBANY WHARF, ALBANY ROAD, CAMBERWELL, S.E.

HORN & SON

OFFICES FOR BRITISH AND FOREIGN

PATENTS AND TRADE MARKS,
SOMERSET CHAMBERS, 151 STRAND, LONDON
(NEXT TO SOMERSET HOUSE).
Guide to New Patent Law and Registration gratis.**EMP. CERAT. SAPONIS.**

ON FINE SHIRTING, 16 IN. WIDE.

6s. per Dozen net cash.

JOHN QUILLIAM & CO., Plaster Works, Manchester.
Cowburn Street, (1)**PERFUMERY****J. N. TAYLOR, Manufacturer,**
67 MORTIMER STREET, REGENT STREET, LONDON, W.**Dunn's** (Healthful, Useful.)Certificate of Analysis on each tin. **Fruit-Salt**Manufactured by **W. G. DUNN & CO. Baking Powder**
21 Mincing Lane, E.C.
Works—Croydon, Surrey.
"THE COOK'S BEST FRIEND."
Price List and Sample on application.**ORANGE WINE**

(VIN. AURANT, P.B.)

Specially brewed for Quinine Wine, does not deposit. Is well adapted for Export, as it will keep good in any climate. In casks, 13, 27, 56, 112, 140 gallons; small casks 3s. 9d. per gall., carriage allowed. In wine bottles (not less than 3 doz.), at 9s. per doz., including bottles. Cases extra and returnable.
Sample six stamps. Special quotations to large buyers.**GEO. DURRANT & CO., Hertford.****THE ALOFAS REMEDIES**

TINCTURES, PILLS, OINTMENTS, EMBROCATION, ETC.

LIBERAL TERMS TO CHEMISTS. Write for Pamphlet and Circular sent post free.

THE ALOFAS COMPANY, Central Depot, 20 New Oxford Street, LONDON, W.C.

TO COUNTRY CHEMISTS.

Send for our New Mounted Specimens of Phenomenal

SALEABLE NOVELTIES for the MILLION
HALF PROFIT. ENORMOUS DEMAND.

Free by Parcel Post for Six Stamps.

THE GLOBE CHEMICAL CO., 336 CITY ROAD, LONDON, E.C.

Send 12 stamps for sample dozen of 3d. Stic Stopping.

BEST GUTTA PERCHA OR METALLIC**TOOTH STOPPINGS**Are Manufactured by **J. J. LAKEMAN, Dentist, LEYTONSTONE.**

Special Terms to Wholesale Buyers.

Maker of the **MERMAID IMPRESSION COMPOSITION** for Dentists' use, 3s. per lb., post free.**PURE WHITE BEESWAX**

Guaranteed pure, of the best quality, in blocks, cakes, or other forms, Candles, and all other articles manufactured of Beeswax, at the lowest possible prices.

QUOTATIONS FREE ON BOARD HAMBURG AND OTHER PORT

Lüneburger Wachsbleiche Wax Bleaching Works,
LUNEBURG (GERMANY).**FOUND DEAD**

BY SANFORD'S RAT POISON.

"I have found 145 rats killed in my farm buildings by it,"—C. Wilson Offord.
"It is the most certain remedy I have ever tried. Little pellets, about the size of a pea, are put in the rat holes or in their runs. I destroyed over 200 rats from one dressing with it."—C. Cook, Grange Farm, Ellesmere, Salop. It is, without doubt, the best ever introduced. Price 6d., 1s., 2s., and 3s., of Chemists.
SANFORD'S MICE POISON for Houses, Buildings, Corn Stacks, &c. Cannot be excelled. Has given entire satisfaction for the past 28 years. In packets 3d., 6d., 1s., and 2s. each with directions for use, of SANFORD & SON, Sande, Beds. Liberal terms to Chemists. Wholesale of Barclay & Son, Sanger & Son, Newbery & Sons, Edwards, and others, London (England).**HAND-PICKED GUM ARABIC.**

Wholesale and Export Druggists before buying elsewhere should apply to

FREDK. FINK & CO.

10 & 11 MINCING LANE, LONDON, E.C.

MOUILLA LIQUID SOAPThe invention of Dr. DENCAN, St. Petersburg.
Beautifully Transparent Golden Colour. Delicately Perfumed.
As prescribed by most eminent Skin Physicians.—See Testimonials.
In handsome bottles with sprinkler tops. Retail, 6d. and 1/6 per bottle. Wholesale terms on application to
The Mouilla Liquid Soap Co., Ltd., 6 Adam St., Strand, W.C.**J. BEACH & SONS,**
WILLOW WALK, BERMONDSEY, LONDON, S.E.

MANUFACTURERS OF

PLASTER SKINS and
WHITE SPLIT SKINS for Capping,
WHOLESALE AND FOR EXPORTATION.For **ASTHMA, CONSUMPTION, COUGHS, COLDS, BRONCHITIS, THROAT AFFECTIONS, SHORTNESS OF BREATH, and all DISORDERS of the CHEST**

Give immediate relief.

Prepared only by **DA SILVA & CO., 26 Bride Lane, Fleet Street LONDON.**
Sold by all Druggists at 1/4, 2/9, 4/6, and 11/ per box.**Critchley's Starch Gloss**

Makes Starched Linen like new. Does not stick to spider-like Materials. Once tried always wanted. Used in the Royal Laundries. Sold everywhere, in 1/4, 1/2, 3/4, and 1s. each. Write for quotations.

Prepared only
T. CRITCHLEY,
BLACKBURN, and
2 BEECH STREET,
LONDON, E.C.**S.V.R.**

In 40-gallon returnable iron casks, pure tinned, with screw bungs, interchangeable brass taps and spanners for opening. Farina, Dextrin, Glucose, Alcohol absolut., Fusel Oil, Pear Oil, Lime-Soda-Lead-Acetates, Vio. gris, Acetic Acid, Wood Naphtha, Charcoal, Ammonia liquid 680-900, anhydrous, Sodium Sulphide Nitrite 96/98 %, Bromides, Iodides, Chlorohydrate, Boracic Acid, Sulphate of Copper, Permanganate of Potash, G. Caryophylli, Menth. Pip. Pinl. Juniperi.

HUGO LORENZ, 7.8 Idol Lane, LONDON, E.C.

“ACME BRAND”

MENTHOL CONES.

Book your wants for “Cones.” Menthol keeps advancing; but at present
OUR PRICES ARE UNCHANGED.

With Orders of £1 5s. we will supply a Pretty China Group, with Sign-post bearing lettering (this makes a striking Advertisement in any Window); or a Japanese figure 18 inches high, with board with inscription, Japan being the “home” of Menthol. This makes an appropriate and telling show figure.

No. 88.	Hard Wood Boxes, Pedestal Shape	1/9 per doz.	No. *206.	Boxwood Boxes, as No. 203, large size.....	3/3 per doz.
89.	Nickel Screw Capped Bottles, 80 grn. Cones.....	3/3 "	*207.	" " Draughtsman Shape	3/6 "
90.	" " " " 60 "	2/9 "	*207B.	" " " small size ..	2/3 "
92.	" " " " 30 "	1/11 "	*208.	Vegetable Ivory, "	4/9 "
*161.	Boxwood Boxes, Acorn Shape.....	3/2 "	*210.	Boxwood Boxes, Acorns, Nickel-plated Caps	3/6 "
*162.	" " Pedestal Shape, Screw Lids.....	3/- "	*211.	Vegetable Ivory Boxes, Nickel-plated Caps	4/- "
*163.	Vegetable Ivory, Acorn Shape	4/- "	*212.	Boxwood Boxes, Bullet Shape, reversible end.....	3/5 "
*200.	Boxwood Boxes, Pedestal Shape	2/2 "	213.	Menthol Charms for Watch Chain, &c.	2/1 "
*201.	" " Barrel Shape, Screw Lids	3/- "	214.	Glass Show Bottle, with Cone on Stopper	3/10 "
*201B.	" " " " extra large Cone ..	4/3 "	214G.	" " " " extra large Cone	5/1 "
*202.	" " " " Bullet "	3/- "	*216.	Boxwood Boxes, Beer Bottle Shape, large Cone ..	4/- "
*203.	" " " " Cone "	3/- "	217.	Glass Show Bottle, with Cone on Stopper	2/9 "
*204.	Vegetable Ivory, Castle "	4/3 "	218.	Menthol and Court Plaster, in Nickel Cases	3/9 "
205.	Boxwood Boxes, Cone Shape, each in box	2/6 "			

NEW PATTERNS, SPECIALLY SALEABLE.

No. *217F.	Glass Show Bottle, with foot, as fig. 88	1/8 per doz.
*217A.	" " " " as fig. 161.....	3/- "
*214A.	" " " " as fig. 161. This has a very large Cone.....	4/3 "
220.	Cone Shape, as fig. 203, each in slide box, 1 dozen in Outer, extra size	4/3 "
*221.	Large Flat Draughtsman, very large Cone (120 grains)	4/9 "
222.	Elegantly-cut Show Glass Bottles, 3 cuttings	9/- "
224.	Enamelled Tin Box, with Printing on box, 30-grain Cone	1/6 "

All Patterns marked thus * may be had 2d. dozen less in Plain Card Boxes, instead of our Registered Hanging Glass Show Case.

All Patterns marked * may be had Curved where possible, at same reduction as for Plain Boxes.

To meet the requirements of those who require

CHEAP MENTHOL CONES

we have decided to offer them at lower prices than hitherto.

We guarantee them all pure Menthol, of best quality.

No. 207s.	Draughtsman Shape, Polished Willow Boxes, usual 1s. size	20/- per gross.
202s.	Bullet " " " " " 9d. "	13/6 "
206s.	Cone " " " " " 9d. "	13/6 "
201.	Barrel " " " " " "	13/6 "
219.	Bottle " " " " " 1d. size	8/- "



163.



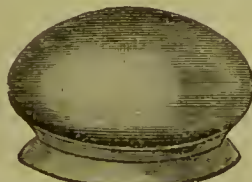
201, 201B, 201s.



88, 162.



202, 202A.



207, 207B, 207s.



220, 203, 205, 206, 203A.



89, 90, 92.



214, 214G, 217.



161, 210, 211.

These Prices are for not less than Half a Gross, one Pattern or Assorted.
All Boxes are best finished, and with label branded on box, except Nos. 216, 221, and 220, and the Glass Show Bottles and Cheap Series.

SPECIAL PRICES FOR QUANTITIES AND LOOSE CONES.
Branded Boxes may be had with Buyer's own name if desired. Particulars on application.

HOCKIN, WILSON & CO.

13 to 16 New Inn Yard, 186a Tottenham Court Road, LONDON, W.

AND MANCHESTER.

TO THE EXPORT TRADE.

WE extend special facilities to all the Foreign Wholesale Houses who handle our goods, and such would find it to their advantage to communicate with us. We prepare a "Vinolia" for Export, put up with direct regard to the exigencies of hot climates, transportation, &c. To avoid mistakes, all "Vinolia" which is designed for foreign trade is stamped with the words "**for Export only.**" Unless the Wholesale Houses bear this in mind, "Vinolia," as ordinarily put up, may be sent out, with consequent disappointment and dissatisfaction.

In order to give Foreign Houses every encouragement and facility to push our goods, and always keep a goodly amount on hand, we undertake to supply "Vinolia" preparations in any quantity whatever to the Foreign Trade at Special Terms.

We are now spending considerable sums of money in advertising in foreign countries with very satisfactory results, both to the trade and ourselves, and an ever-growing demand for our goods. We would therefore suggest to all the Foreign Houses that they look to it that their supply of "Vinolia" preparations is not allowed to run low, as those who always have them on hand will be most likely to reap the largest share of the returns. Our experience has been that those who have our preparations first in stock do the best in them.

All the leading houses in this country have had as much pleasure and profit out of handling "Vinolia," "Vinolia" Powder, and "Vinolia" Soap (Toilet, Medical and Shaving), as out of any of the products introduced in recent times, as they are the embodiment of the highest perfection in Pharmaceutical Art. Warmest expressions of admiration, favour, and good report reach us daily from both Medical Men and the Trade. It seems only reasonable for us to find that as our products have been found so satisfactory and generally profitable to the trade in this country, they are proving likewise where taken up with interest abroad.

We are always desirous to co-operate with the trade in every possible way. With this regard we supply most artistic and costly show cards, and literature of the highest class it is possible for us to produce. Our pamphlets are all issued in a unique form, and their execution alone, to say nothing of their superior body matter, is most creditable to all distributing them. Literature can always be obtained from us in any quantities desired.

Our goods are handled by all the prominent houses of foreign countries, among whom may be mentioned the following firms:—

FELTON, GRIMWADE & CO., Melbourne.
ROCKE, TOMPSITT & CO., Melbourne.
ELLIOTT BROS., Ltd., Brisbane and Sydney.
PROSSER, TAYLOR & CO., Brisbane.
THE NEW ZEALAND DRUG CO., Dunedin,
Christchurch, Wellington, and Auckland.
SHARLAND & CO., New Zealand.
LENNON & CO., Port Elizabeth, South Africa.
KUNTZEN & CO., Brazil.

H. NATHAN & CO., Australia.
THE AUSTRALIAN DRUG CO., Ltd., Sydney
ROBERTS & CO., Rue de la Paix, Paris.
KEMP & CO., Bombay.
BATHGATE & CO., Calcutta.
EVANS, LESCHER & WEBB, Spain.
CASWELL, MASSEY & CO., New York.
NEIL S. CAMPBELL & CO., Colombo, Ceylon.
TREACHER & CO., Bombay.

Prices:—"VINOLIA," 1s. 9d., 3s. 6d., and 6s. per Box; "VINOLIA" POWDER, 1s. 9d., 3s. 6d., and 6s. per Box; "VINOLIA" TOILET SOAP, 2s. 6d. per Box of Three Tablets; "VINOLIA" MEDICAL SOAP, 2s. per Box of Three Tablets; "VINOLIA" SHAVING SOAP, 2s. and 3s. 6d. per stick.

BLONDEAU et CIE., London, Paris, and New York.

English Depôt—Ryland Road, London, N.W.